Ocean Ecology Data Report: Coastal Waters Off Southwest Vancouver Island. Spring and Summer 1979.

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Canadian Data Report of Hydrography and Ocean Science No. 3

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Canada

Canadian Data Report Of Hydrography and Ocean Sciences

These reports provide a medium for the documentation and dissemination of data in a form directly useable by the scientific and engineering communities.

Generally, the reports will contain raw and/or analyzed data but will not contain interpretations of the data. Such compilations will commonly have been prepared in support of work related to the programs and interests of the Ocean Science and Surveys (OSS) sector of the Department of Fisheries and Oceans.

Data Reports are produced regionally but are numbered and indexed nationally. Requests for individual reports will be fulfilled by the issuing establishment listed on the front cover and title page. Out of stock reports will be supplied for a fee by commercial agents.

Regional and headquarters establishments of Ocean Science and Surveys ceased publication of their various report series as of December 1981. A complete listing of these publications and the last number issued under each title are published in the *Canadian Journal of Fisheries and Aquatic Sciences*, Volume 38: Index to Publications 1981. The current series began with Report Number 1 in January 1982.

Rapport statistique canadien sur l'hydrographie et les sciences océaniques

Ces rapports servent de véhicule pour la compilation et la diffusion des données sous une forme directement utilisable par les scientifiques et les techniciens.

En général, les rapports contiennent des données brutes ou analysées mais ne fournissent pas d'interprétations des données. Ces compilations sont préparées le plus souvent à l'appui de travaux reliés aux programmes et intérêts du service des Sciences et Levés océaniques (SLO) du ministère des Pêches et des Océans.

Les rapports statistiques sont produits à l'échelon régional mais sont numérotés et placés dans l'index à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page de titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Les établissements des Sciences et Levés océaniques dans les régions et à l'administration centrale ont cessé de publier leurs diverses séries de rapports depuis décembre 1981. Vous trouverez dans l'index des publications du volume 38 du *Journal canadien des sciences halieutiques et aquatiques*, la liste de ces publications ainsi que le dernier numéro paru dans chaque catégorie. La nouvelle série a commencé avec la publication du Rapport n° 1 en janvier 1982.

Canadian Data Report of
Hydrography and Ocean Science No. 3.

1982

OCEAN ECOLOGY DATA REPORT:
COASTAL WATERS OFF SOUTHWEST VANCOUVER ISLAND.
SPRING AND SUMMER 1979.

by

S. Hill, K. Denman, D. Mackas and H. Sefton.

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ABSTRACT

Hill, S., K. Denman, D. Mackas, H. Sefton, 1982. Ocean Ecology Data Report: Coastal Waters off Southwest Vancouver Island. Spring and Summer 1979. Can. Data Rep. Hydrogr. Ocean Sci. 3: 118 p.

The results of a 1979 sampling program in coastal waters off the southwest coast of Vancouver Island are presented, including physical, chemical and biological data from analysis of bottle samples collected with an integrated vertical profiler, and zooplankton counts from vertical net hauls.

RÉSUMÉ

Hill, S., K. Denman, D. Mackas, H. Sefton, 1982. Ocean Ecology Data Report: Coastal Waters off Southwest Vancouver Island. Spring and Summer 1979. Can. Data Rep. Hydrogr. Ocean Sci. 3: 118 p.

Les results d'une étude des eaux côtières du sud-ouest de l'Isle de Vancouver sont présentés. On inclus les données physiques, chimiques et biologiques de l'analyse des échantillons d'eau recueillis durant les profile verticaux, et les comptes de zooplankton recueillis avec les coups de filet verticaux.

Acknowledgements

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Introduction

During the spring and summer of 1979, 3 research cruises in the area of Juan de Fuca Strait and the coastal waters off the southwest coast of Vancouver Island were undertaken by the Ocean Ecology group at the Institute of Ocean Sciences (IOS). The purpose of these cruises was to locate persistent areas of high planktonic biomass and productivity and to investigate oceanographic processes responsible for these areas of high productivity. On these cruises, physical, chemical and biological data were collected with an integrated oceanographic vertical profiler (OVP) consisting of several electronic sensors, a data acquisition system (DAS), and a remotely triggerable array of Niskin bottles (rosette sampler). In this report we present the results of the analysis of bottle samples, together with selected data from the electronic sensors, and a cruise-by-cruise inventory of the total data set available from the OVP. Data from the analysis of zooplankton samples collected by vertical net hauls is also included.

Sampling and analytical Methods

1. Electronic sensors.

Sensors used on the 1979 cruises include a Guildline Model 8701 CTD and a Variosens III *in situ* fluorometer set up to measure chlorophyll fluorescence. Outputs from these sensors were multiplexed, digitized, and communicated in serial mode to the surface via 7-conductor armoured cable through an oceanographic winch. The DAS was designed and constructed at IOS. At the surface, data from the DAS was sent to a Hewlett-Packard 9845 computer, which stored the data on 8-inch flexible disks and performed some real-time data analysis and graphics display. A typical cast of the OVP consisted of two phases. First, the package was lowered at a speed of 0.5 to 1.0 m/sec. During this time the electronic sensors were sampled and logged at a frequency of 8 Hz. Then, after determining the depths at which the bottles were to be tripped, the OVP was raised at a speed of approximately 0.5 m/sec and bottles were tripped "on the fly".

2. Bottle data

a) temperature: duplicate temperatures from protected reversing thermometers were taken periodically as a check on the CTD temperatures. An offset correction was later applied to the CTD temperatures.

b) salinity: salinity samples were collected periodically as a check on the CTD conductivity measurement. These samples were analysed later in the laboratory using an Autosal model 8400 induction salinometer. An offset correction was later applied to the CTD salinities.

c) chlorophyll: the chlorophyll content of phytoplankton samples was determined at sea using the fluorometric technique outlined in Strickland and Parsons (1972). These values were used to adjust the Variosens chlorophyll value (derived from a laboratory calibration using live phytoplankton cultures) for varying field conditions.

d) dissolved oxygen: the dissolved oxygen content of bottle samples was determined at sea using the Winkler technique outlined in Strickland and Parsons (1972). Samples were "fixed" with manganous sulphate and alkaline iodide solution within 15 minutes of being drawn, and titrations were carried out within 24 hours of sampling.

e) inorganic nutrients: reactive nitrate-nitrite, phosphate and silicate concentrations were measured using colorimetric methods with a Technicon II auto-analyser. On the first two cruises (79-03 and 79-04) the analyses were done at sea. Subsequently, water samples were quick-frozen immediately after collection and were kept frozen until analysis.

f) primary productivity: three sample bottles (1 dark, 2 light) were drawn from rosette bottles. These were inoculated with 1 ml of 5 µC/ml ^{14}C (as bicarbonate) and incubated for at least 2 hours under fluorescent lights. These samples were then filtered onto 0.45 micron Millipore filters which were fumed over concentrated hydrochloric acid for 1 minute, and then placed in 15 ml of

Aquasol. The activity of these samples was determined later using a scintillation counter, and the results used to estimate primary productivity.

g) phytoplankton counts: samples were drawn from rosette bottles, preserved in Lugol's solution, and stored for later analysis. Subsamples (ranging from 2.2 ml to 100 ml) were settled out and counted with an inverted microscope.

h) zooplankton counts: zooplankton samples were collected in vertical net hauls, using a net with one-half m^2 opening, #6 mesh (233 micron), and a mechanical flowmeter. Samples were preserved in 5% to 10% formalin in seawater for later analysis.

Estimated accuracy and precision of data

1. CTD values - the manufacturer gives the accuracy and precision of the sensors as follows:

Variable	Accuracy	Precision
Pressure	: ±1.25 dbar	±0.25 dbar
Temperature	: ±0.01 deg. C.	±0.003 deg. C.
Equivalent salinity	: ±0.01 ppt	±0.005 ppt

2. Chlorophyll - Strickland and Parsons (1972) estimate that the fluorometric technique should give a value within 8% of the true value for any chlorophyll concentrations greater than 0.5 µg/l.

3. Dissolved oxygen - Strickland and Parsons (1972) estimate that the Winkler technique should give a value within 0.034 ml/l of the true value.

4. Inorganic nutrients - replicate analyses were done for some samples from cruises 79-04, 79-05, and 80-05. Measurement precision was estimated through a statistical treatment of these data, and the values found are summarized below (all values are in µM/l):

Cruise	Nitrate error	Phosphate error	Silicate error
79-04	0.101	0.056	0.087
79-05	0.154	0.152	0.157
80-05	0.182	0.024	0.067
SUM	0.150	0.112	0.124

5. Primary productivity - the precision of this method is described in Strickland and Parsons (1972).

References

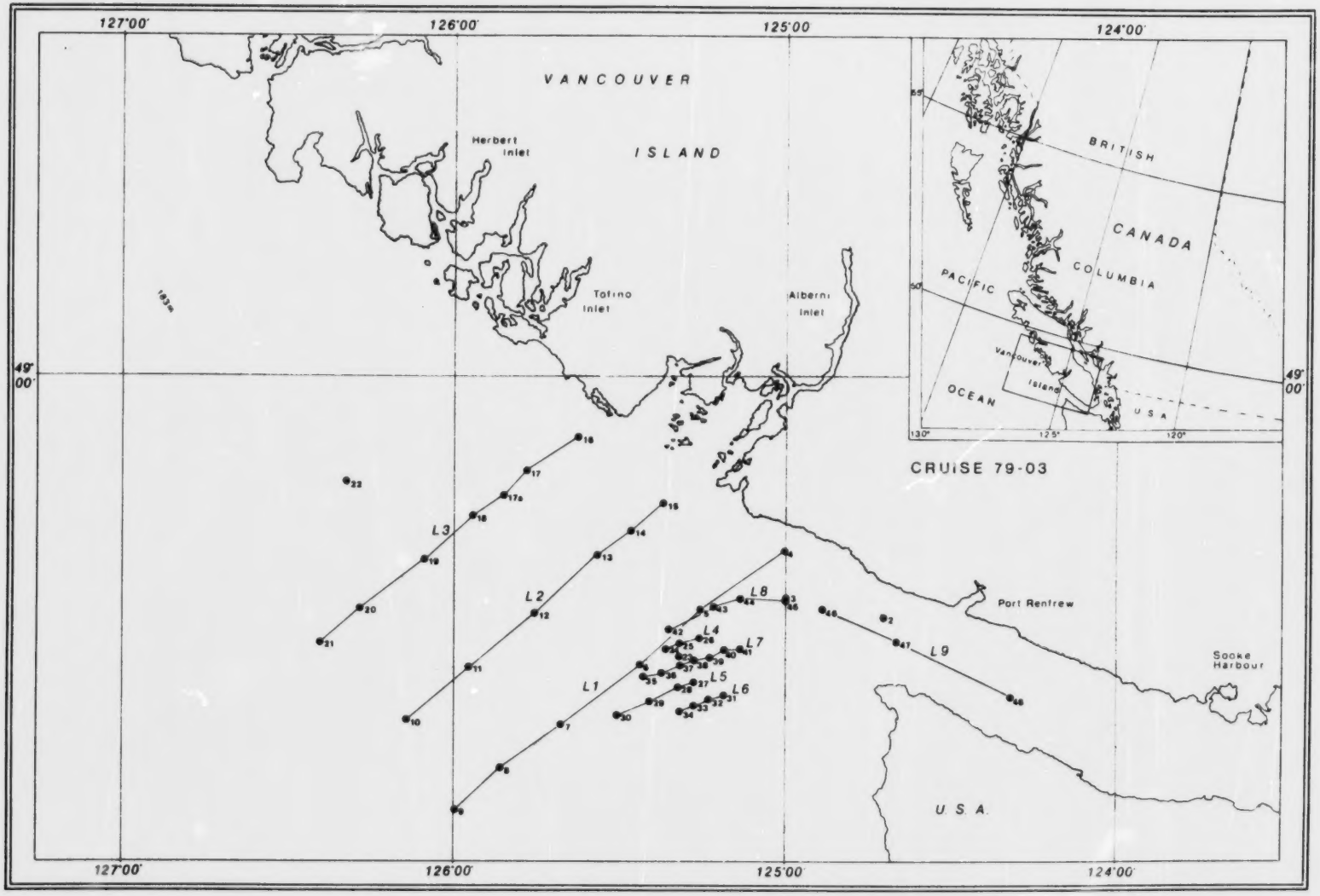
Strickland, J.D.H. and Parsons, T.R., 1972. A Practical Manual of Seawater Analysis. Bulletin 167 (2nd ed.), Fisheries Research Board of Canada.

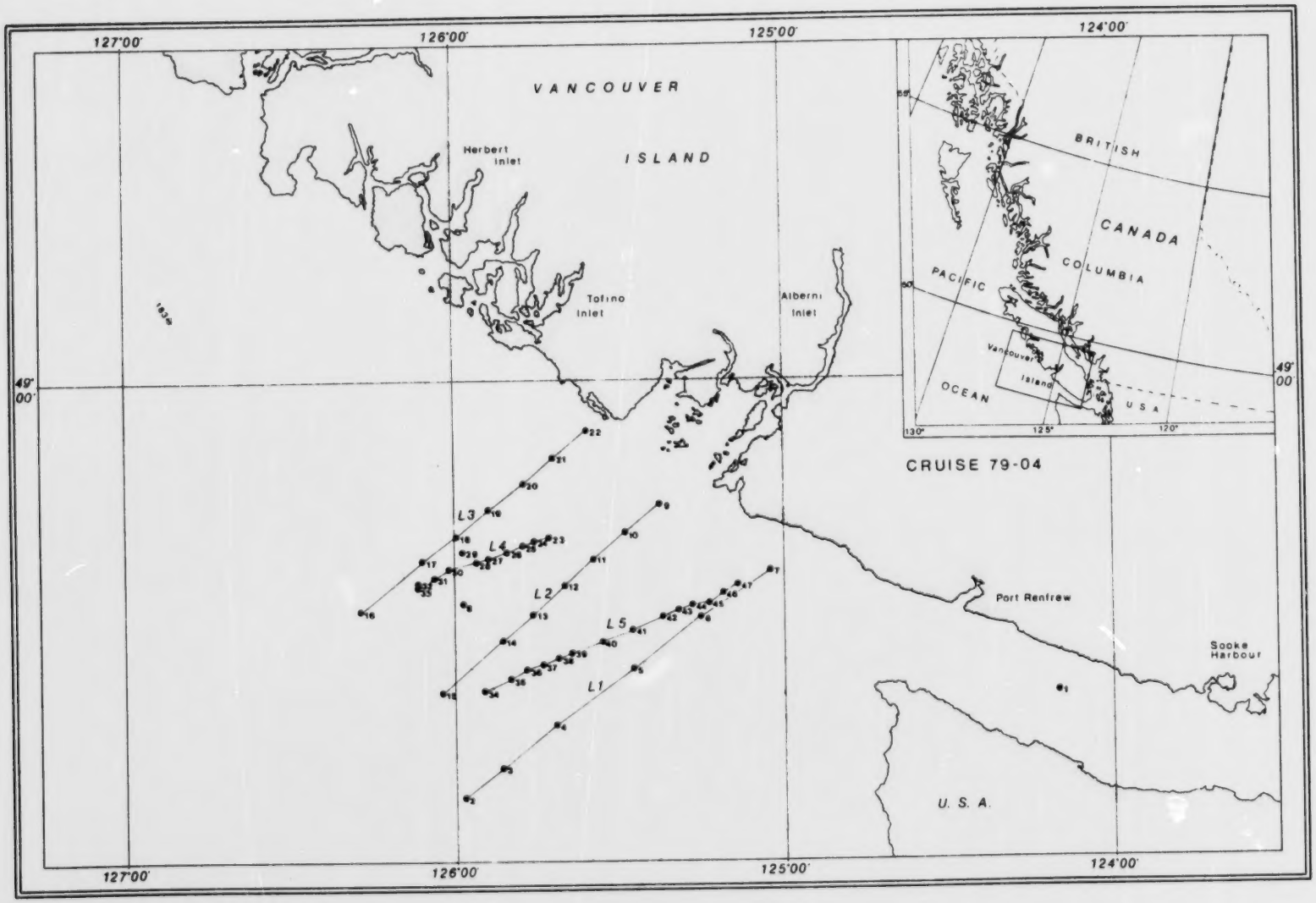
Notes

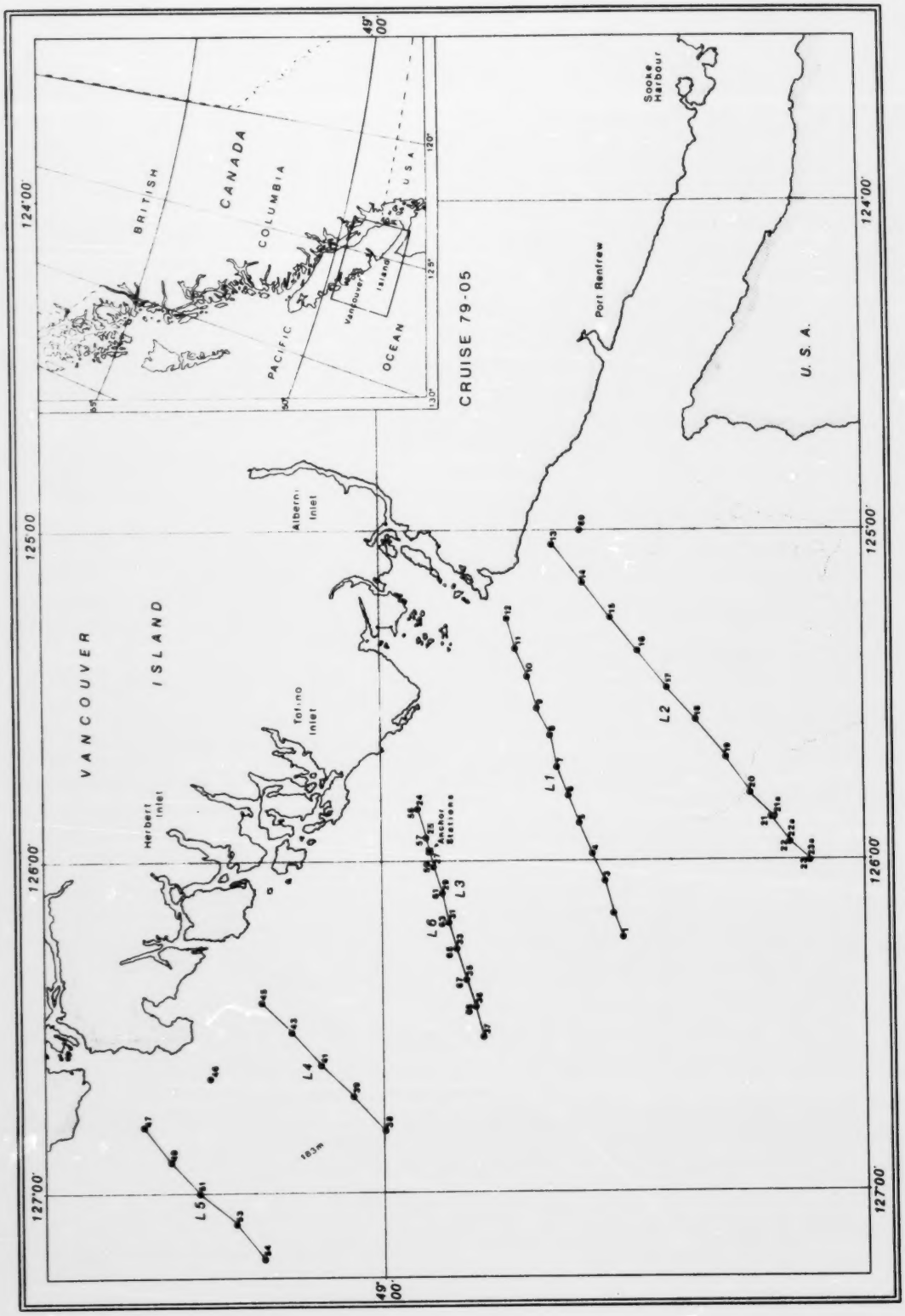
1. The horizontal sections of dissolved oxygen and nutrient concentrations in this report were plotted with a minimum of interpretation. Vertical (and occasionally horizontal) interpolation between data points was used to compute the isopleth points, and the isopleths were then drawn in by a "join-the-dots" technique. Extrapolation of isopleths to the surface or to the bottom was not attempted.

2. The zooplankton samples described in this report were all analyzed by the same worker (H. Sefton). Similarly, the phytoplankton samples were all analyzed by M. Austin.

3. The data inventory shows several stations (denoted by "A" followed by one or two numbers) which were occupied in Alberni Inlet during cruise 79-05. None of the data from these stations is presented in this report, but they have been included in the inventory for completeness.


127°00'
126°00'
125°00'
124°00'
VANCOUVER
ISLAND
Herbert Inlet
Tofino Inlet
Alberni Inlet
49° 00'
L1
L2
L3
L4
L5
L6
L7
L8
L9
Port Renfrew
Sooke Harbour
U.S.A.
BRITISH
CANADA
COLUMBIA
PACIFIC
OCEAN
Vancouver Island
U S A
55°
50°
130°
125°
120°
CRUISE 79-03


127°00'
126°00'
125°00'
124°00'
VANCOUVER
ISLAND
Herbert Inlet
Tofino Inlet
Alberni Inlet
49° 00'
L1
L2
L3
L4
L5
Port Renfrew
Sooke Harbour
U. S. A.
BRITISH
COLUMBIA
CANADA
PACIFIC
OCEAN
Vancouver Island
USA
130°
125°
120°
CRUISE 79-04


CRUISE 79-05
VANCOUVER ISLAND
U. S. A.
BRITISH COLUMBIA
CANADA
PACIFIC OCEAN
Port Renfrew
Sooke Harbour
Alberni Inlet
Tofino Inlet
Herbert Inlet
Anchor Stations
L1
L2
L3
L4
L5
L6
183m
124°00'
125°00'
126°00'
127°00'
49°00'

CRUISE 7903

DATA TYPES AVAILABLE: "+" = available; "-" = not available

STN NO.	DATE DA/MO	TIME (PDT)	LAT	LONG	CTD	VARIO. CHL a	pH	O_2	NUTRI-ENTS	CHL a	^{14}C	PHYTO - PLANKTON	ZOO - PLANKTON
2	22 05	19 25	48°31.2'	124°43.0'	-	-	-	+	+	+	+	-	+
3	23 05	09 25	48°33.5'	125°00.0'	+	-	-	+	+	+	+	-	+
4	23 05	11 05	48°39.0'	125°03.0'	+	-	+	+	+	+	+	-	+
5	23 05	13 10	48°32.2'	125°15.7'	+	-	+	+	+	+	+	-	+
6	23 05	14 30	48°25.6'	125°27.3'	+	-	+	+	+	+	+	-	+
7	23 05	16 25	48°18.6'	125°41.1'	+	-	+	+	+	+	+	-	+
8	23 05	18 04	48°13.1'	125°51.5'	+	-	+	+	+	+	+	-	+
9	23 05	19 35	48°08.3'	125°59.9'	-	-	+	+	+	+	+	-	+
10	24 05	08 52	48°19.1'	126°08.3'	+	-	+	+	+	+	+	-	+
11	24 05	10 15	48°25.5'	125°57.3'	+	-	+	+	+	+	+	-	+
12	24 05	12 07	48°31.9'	124°45.6'	+	-	+	+	+	+	+	-	+
13	24 05	13 21	48°38.5'	125°34.2'	+	-	+	+	+	+	+	-	+
14	24 05	14 47	48°41.8'	125°28.2'	+	-	+	+	+	+	+	-	+
15	24 05	15 39	48°45.0'	125°22.4'	+	-	+	+	+	+	+	-	+
16	25 05	08 28	48°53.2'	125°37.6'	+	-	+	+	+	+	+	-	+
17	25 05	09 28	48°48.9'	125°47.2'	+	-	+	+	+	+	+	-	+
17A	25 05	10 33	48°46.0'	125°50.9'	+	-	+	+	+	+	+	-	-
18	25 05	11 23	48°43.3'	125°56.5'	+	-	+	+	+	+	+	-	+
19	25 05	12 53	48°38.1'	126°05.4'	+	-	+	+	+	+	+	-	+
20	25 05	14 07	48°32.5'	126°17.1'	+	-	+	+	+	+	+	-	+
21	25 05	15 53	48°28.2'	126°24.4'	+	-	+	+	+	+	+	-	+
22	25 05	17 59	48°47.3'	126°19.5'	+	-	+	+	+	+	+	-	+
23	26 05	08 31	48°26.6'	125°24.2'	+	-	+	-	+	+	+	-	-
24	26 05	09 10	48°27.5'	125°22.0'	+	-	+	-	+	+	+	-	+
25	26 05	10 04	48°28.2'	125°19.3'	+	-	+	-	+	+	+	-	-
26	26 05	10 42	48°29.0'	125°16.5'	+	-	+	-	+	-	+	-	+
27	26 05	11 53	48°23.5'	125°16.4'	+	-	+	-	+	+	+	-	-
28	26 05	12 53	48°22.8'	125°19.3'	+	-	+	-	+	+	+	-	+
29	26 05	15 55	48°21.1'	125°24.8'	+	-	+	-	+	+	+	-	-
30	26 05	15 55	48°19.6'	125°30.5'	+	-	+	-	+	+	+	-	+
31	27 05	08 18	48°22.0'	125°11.3'	+	-	+	-	+	+	+	-	-
32	27 05	08 48	48°21.5'	125°13.9'	+	-	+	-	+	+	+	-	-
33	27 05	10 02	48°20.8'	125°16.7'	+	-	+	-	+	+	+	-	-
34	27 05	10 43	48°20.1'	125°19.5'	+	-	+	-	+	+	+	-	+
35	27 05	11 48	48°24.0'	125°25.3'	+	-	+	-	+	+	+	-	-
36	27 05	12 49	48°24.8'	125°22.2'	+	-	+	-	+	+	+	-	-
37	27 05	13 25	48°25.7'	125°19.1'	+	-	-	-	+	+	+	-	-
38	27 05	14 14	48°26.1'	125°16.3'	+	-	+	-	+	+	+	-	+
39	27 05	14 58	48°26.7'	125°13.6'	+	-	+	-	+	+	+	-	-
40	27 05	15 38	48°27.8'	125°11.0'	+	-	+	-	+	+	+	-	-
41	27 05	16 11	48°27.5'	125°08.2'	+	-	+	-	+	+	+	-	-
42	28 05	08 41	48°30.1'	125°21.7'	+	-	+	-	+	+	+	-	-
43	28 05	09 41	48°32.4'	125°13.8'	+	-	+	-	+	+	+	-	-
44	28 05	10 44	48°33.8'	125°08.1'	+	-	+	-	+	+	+	-	+
45	28 05	12 00	48°33.3'	125°00.0'	+	-	+	-	-	+	+	-	-
46	28 05	13 00	48°32.2'	124°53.2'	+	-	+	-	+	+	+	-	-
47	28 05	14 23	48°28.3'	124°40.0'	+	-	+	-	+	+	+	-	+
48	28 05	16 08	48°21.5'	124°19.4'	+	-	+	-	+	+	+	-	+

CRUISE 7904

DATA TYPES AVAILABLE: "+" = available; "-" = not available

STN NO.	DATE DA/MO	TIME (PDT)	LAT	LONG	CTD	VARIO. CHL a	pH	O_2	NUTRI-ENTS	CHL a	^{14}C	PHYTO - PLANKTON	ZOO - PLANKTON
1	04 07	18 40	48°22.5'	124°10.0'	+	+	+	+	+	+	+	-	+
2	05 07	08 24	48°10.0'	125°58.7'	+	+	+	+	+	+	+	+	+
3	05 07	10 07	48°13.6'	125°51.5'	+	+	+	+	+	+	+	+	+
4	05 07	11 34	48°18.5'	125°41.6'	+	+	+	+	+	+	+	+	+
5	05 07	13 24	48°25.3'	125°27.5'	+	+	+	+	+	+	+	+	+
6	05 07	15 04	48°31.3'	125°15.1'	+	+	+	+	+	+	+	+	+
7	05 07	16 38	48°37.1'	125°02.8'	+	+	+	+	+	+	+	+	+
8	05 07	18 15	48°33.1'	124°58.6'	+	+	+	+	+	+	+	+	+
9	06 07	08 00	48°45.2'	125°22.0'	+	+	+	+	+	+	+	+	+
10	06 07	09 09	48°41.9'	125°28.3'	+	+	+	+	+	+	+	+	+
11	06 07	10 15	48°38.5'	125°34.0'	+	+	+	+	+	+	+	+	+
12	06 07	11 21	48°35.4'	125°39.4'	+	+	+	+	+	+	+	+	+
13	06 07	15 06	48°31.9'	125°45.5'	+	+	+	+	+	+	+	+	+
14	06 07	16 16	48°28.7'	125°51.2'	+	+	+	+	+	+	+	+	+
15	06 07	18 09	48°22.2'	126°02.6'	+	+	+	+	+	+	+	+	+
16	07 07	06 35	48°32.5'	126°17.0'	+	+	+	+	+	+	+	+	+
17	07 07	08 17	48°38.3'	126°05.5'	+	+	+	+	+	+	+	+	+
17A	07 07	08 57	48°40.0'	126°02.5'	+	+	-	-	-	+	-	-	-
18	07 07	09 44	48°41.5'	125°59.5'	+	+	+	+	+	+	+	+	+
18A	07 07	10 25	48°43.1'	125°56.4'	+	+	-	-	-	+	-	-	-
19	07 07	11 14	48°44.7'	125°53.5'	+	+	+	+	+	+	+	+	+
19A	07 07	12 16	48°46.3'	125°50.4'	+	+	-	-	-	+	-	-	-
20	07 07	13 00	48°47.8'	125°47.5'	+	+	+	+	+	+	+	+	+
20A	07 07	13 43	48°49.4'	125°44.5'	+	+	-	-	-	+	-	-	-
21	07 07	14 20	48°50.9'	125°41.6'	+	+	+	+	+	+	+	+	+
21A	07 07	15 39	48°52.5'	125°38.5'	+	+	-	-	-	+	-	-	-
22	07 07	16 30	48°54.1'	125°35.5'	+	+	+	+	+	+	+	+	+
23	09 07	10 29	48°41.2'	125°42.3'	+	+	+	-	-	+	+	-	+
24	09 07	11 02	48°40.8'	125°45.0'	+	+	+	-	-	+	+	-	-
25	09 07	11 29	48°40.1'	125°47.5'	+	+	+	-	-	+	+	-	-
26	09 07	11 59	48°39.4'	125°50.2'	+	+	+	-	-	+	+	-	-
27	09 07	12 33	48°38.8'	125°53.0'	+	+	+	-	-	+	+	-	+
28	09 07	13 00	48°38.2'	125°55.6'	+	+	+	-	-	+	+	-	-
29	09 07	13 25	48°39.6'	125°58.3'	+	+	+	-	-	+	+	-	-
30	09 07	13 50	48°37.1'	126°00.9'	+	+	+	-	-	+	+	-	-
31	09 07	14 20	48°36.4'	126°03.5'	+	+	+	-	-	+	+	-	-
32	09 07	14 45	48°35.8'	126°06.2'	+	+	+	-	-	+	+	-	-
33	09 07	15 48	48°35.2'	126°06.2'	+	+	+	-	-	+	+	-	+
34	11 07	14 41	48°22.8'	125°54.8'	+	+	+	+	+	+	+	-	+
35	11 07	15 25	48°24.4'	125°49.3'	+	+	+	+	+	+	+	-	-
36	11 07	15 58	48°25.0'	125°46.5'	+	+	+	+	+	+	+	-	-
37	11 07	16 21	48°25.8'	125°43.8'	+	+	+	+	+	+	+	-	-
38	11 07	16 45	48°26.5'	125°41.0'	+	+	-	+	+	-	-	-	-
39	11 07	17 08	48°27.2'	125°38.3'	+	+	+	+	+	+	+	-	-
40	11 07	17 42	48°28.6'	125°32.8'	+	+	+	+	+	+	+	-	-
41	11 07	18 20	48°30.0'	125°27.3'	+	+	+	+	+	+	+	-	-
42	11 07	19 05	48°31.6'	125°22.0'	+	+	+	+	+	+	+	-	+
43	11 07	19 31	48°32.3'	125°19.0'	+	+	+	+	+	+	+	-	-
44	11 07	20 00	48°32.9'	125°16.3'	+	+	+	+	+	+	+	-	-

CRUISE 7904 CONT'D

DATA TYPES AVAILABLE: "+" = available; "-" = not available

STN NO.	DATE DA/MO	TIME (PDT)	LAT	LONG	CTD	VARIO. CHL a	pH	O_2	NUTRI-ENTS	CHL a	^{14}C	PHYTO - PLANKTON	ZOO - PLANKTON
45	11 07	20 29	48°32.9'	124°13.6'	+	+	+	+	+	+	+	-	-
46	11 07	21 14	48°34.3'	125°11.0'	+	+	+	+	+	+	+	-	+
47	11 07	21 13	48°35.0'	125°08.2'	+	+	+	+	+	+	+	-	-

CRUISE 7905

DATA TYPES AVAILABLE: "+" = available; "-" = not available

STN NO.	DATE DA/MO	TIME (PDT)	LAT	LONG	CTD	VARIO. CHL a	pH	O_2	NUTRI-ENTS	CHL a	^{14}C	PHYTO - PLANKTON	ZOO - PLANKTON
1	24 08	08 18	48°31.0'	126°14.0'	+	+	-	+	+	+	-	-	+
2	24 08	09 14	48°32.2'	126°09.2'	+	+	+	+	+	+	+	-	-
3	24 08	10 12	48°33.5'	126°03.8'	+	+	+	+	+	+	+	+	-
4	24 08	11 13	48°34.8'	125°58.6'	+	+	+	+	+	+	+	-	+
5	24 08	12 15	48°36.0'	125°53.2'	+	+	+	+	+	+	+	-	-
6	24 08	13 14	48°37.3'	125°47.9'	+	+	+	+	+	+	+	+	+
7	24 08	14 00	48°38.6'	125°42.6'	+	+	+	+	+	+	+	+	-
8	24 08	14 54	48°39.8'	125°37.3'	+	+	+	+	+	+	+	+	+
9	24 08	15 46	48°41.1'	125°31.9'	+	+	+	+	+	+	+	-	-
10	24 08	16 46	48°42.3'	125°26.7'	+	+	+	+	+	+	+	-	+
11	24 08	17 44	48°43.4'	125°21.3'	+	+	+	+	+	+	+	+	-
12	24 08	18 38	48°44.7'	125°16.1'	+	+	+	+	+	+	+	+	+
13	24 08	09 06	48°39.0'	125°02.5'	+	+	+	+	+	+	+	+	+
14	24 08	10 02	48°35.6'	125°09.0'	+	+	+	+	+	+	+	-	-
15	25 08	11 05	48°32.2'	125°15.5'	+	+	+	+	+	+	+	+	+
16	25 08	12 01	48°28.9'	125°21.8'	+	+	+	+	+	+	+	-	-
17	25 08	13 07	48°25.5'	125°28.3'	+	+	+	+	+	+	+	+	+
18	25 08	14 00	48°22.0'	125°34.7'	+	+	+	+	+	+	+	-	-
19	25 08	15 04	48°18.6'	125°41.2'	+	+	+	+	+	+	+	+	+
20	25 08	16 08	48°15.1'	124°47.7'	+	+	+	+	+	+	+	-	-
21	25 08	17 58	48°12.9'	125°52.0'	+	+	-	+	+	-	-	+	+
21A	25 08	16 50	48°12.9'	125°52.0'	-	-	+	+	+	+	+	-	-
22	25 08	19 46	48°10.6'	125°56.2'	+	+	-	+	-	+	-	-	-
22A	25 08	-	48°10.6'	125°56.2'	-	-	-	+	-	-	-	-	-
23	25 08	20 31	48°08.5'	126°00.0'	+	+	-	+	+	+	-	-	+
23A	25 08	21 20	48°08 5'	126°00.0'	-	-	+	+	+	+	+	-	-
24	26 08	09 29	48°55.5'	125°50.5'	+	+	+	+	+	+	+	+	+
25	26 08	10 09	48°54.6'	125°55.5'	+	+	+	+	+	+	+	+	-
26	25 08	10 34	48°54.2'	125°58.6'	+	+	-	-	-	+	-	-	-
27	26 08	11 15	48°53.8'	126°00.7'	+	+	+	+	+	+	+	+	+
28	26 08	11 40	48°53.2'	126°03.2'	+	+	-	-	-	-	-	-	-
29	26 08	12 14	48°52.7'	126°05.7'	+	+	+	+	+	+	+	+	-
29A	26 08	12 24	48°52.7'	126"05.7'	+	+	-	-	-	+	-	-	-
30	26 08	12 51	48"52.3'	126°08.3'	+	+	-	-	-	+	-	-	-
31	26 08	13 34	48"51.9'	126°10.9'	+	+	+	+	+	+	+	+	+
32	26 08	13 59	48°51.3'	126°13.4'	+	+	-	-	-	+	-	-	-
33	26 08	14 35	48°50.8'	126°15.9'	+	+	+	+	+	+	+	+	-

CRUISE 7905 CONT'D

DATA TYPES AVAILABLE: "+" = available; "-" = not available

STN NO.	DATE DA/MO	TIME (PDT)	LAT	LONG	CTD	VARIO. CHL a	pH	O_2	NUTRI-ENTS	CHL a	^{14}C	PHYTO - PLANKTON	ZOO - PLANKTON
34	26 08	15 04	48°50.3'	126°18.5'	+	+	-	-	-	+	-	-	-
35	26 08	15 57	48°49.8'	126°21.0'	+	+	+	+	+	+	+	+	+
36	26 08	16 53	48°48.5'	126°26.2'	+	+	+	+	+	+	+	-	-
37	26 08	18 19	48°47.4'	126°31.8'	+	+	+	+	+	+	+	+	+
38	27 08	06 50	48°59.3'	126°48.4'	+	+	+	+	+	+	+	-	+
39	27 08	08 00	49°03.2'	126°42.4'	+	+	+	+	+	+	+	+	-
40	27 08	08 32	40°05.1'	126°39.6'	+	-	-	-	-	+	-	-	-
41	27 08	09 28	49°07.0'	126°36.9'	+	+	+	+	+	+	+	+	+
42	27 08	10 00	49°08.8'	126°34.0'	+	-	-	-	-	+	-	-	-
43	27 08	10 43	49°10.8'	126°31.2'	+	+	+	+	+	+	+	+	-
44	27 08	11 11	49°12.6'	126°28.4'	+	-	-	-	-	+	-	-	-
45	27 08	12 01	49°14.4'	126°25.7'	+	+	+	+	+	+	+	+	+
46	27 08	13 26	49°20.5'	126°39.0'	+	+	+	+	+	+	+	-	-
47	27 08	14 53	49°28.7'	126°48.7'	+	+	+	+	+	+	+	+	+
48	27 08	15 25	49°27.0'	126°51.5'	+	-	-	-	-	+	-	-	-
49	27 08	16 07	49°25.2'	126°54.2'	+	+	+	+	+	+	+	+	-
50	27 08	17 00	49°23.4'	126°57.1'	+	-	-	-	-	+	-	-	-
51	27 08	17 43	49°21.6'	127°00.0'	+	+	+	+	+	+	+	+	+
52	27 08	18 13	49°19.7'	127°02.9'	+	-	-	-	-	+	-	-	-
53	27 08	19 00	49°17.8'	127°05.8'	+	+	+	+	+	+	+	+	-
54	27 08	20 01	49°14.0'	127°11.7'	+	+	+	+	+	+	+	-	+
55	29 08	11 22	48°55.5'	125°50.5'	+	+	+	+	+	+	-	-	+
56	29 08	11 47	48°55.0'	125°53.0'	+	-	-	-	-	+	+	+	-
57	29 08	12 25	48°54.6'	125°55.5'	+	+	+	+	+	+	-	-	-
58	29 08	12 48	48°54.3'	125°58.4'	+	-	-	-	-	+	+	+	+
59	29 08	13 25	48°53.9'	126°00.7'	+	+	+	+	+	+	-	-	-
60	29 08	13 45	48°53.2'	126°03.2'	+	-	-	-	-	+	+	+	-
61	29 08	14 21	48°52.7'	126°05.7'	+	+	+	+	+	+	-	-	-
62	29 08	14 39	48°52.3'	126°08.3'	+	-	-	-	-	+	+	+	+
63	29 08	15 32	48°51.9'	126°10.9'	+	+	+	+	+	+	-	-	-
64	29 08	15 53	48°51.3'	126°13.4'	+	-	-	-	-	+	+	+	-
65	29 08	16 36	48°50.8'	126°15.9'	+	+	+	+	+	+	-	-	-
66	29 08	17 09	48°50.3'	126°18.5'	+	-	-	-	-	+	+	+	+
67	29 08	18 01	48°49.8'	126°21.0'	+	+	+	+	+	+	+	+	-
68	29 08	18 47	48°48.5'	126°26.2'	+	+	+	+	+	+	+	-	+
69	30 08	05 54	48°35.9'	125°00.0'	+	+	+	+	+	+	+	-	+
A	28 08	08 21	48°54.0'	125°58.8'	+	+	+	+	+	+	-	-	-
B	28 08	08 59	48°54.3'	125°58.4'	+	-	-	-	-	+	+	-	-
C	28 08	10 09	48°54.3'	125°58.4'	+	+	+	+	+	+	-	-	-
D	28 08	10 56	48°54.3'	125°58.4'	+	-	-	-	-	+	+	-	-
E	28 08	12 07	48°53.9'	125°58.9'	+	+	+	+	+	+	-	-	-
F	28 08	12 52	48°54.3'	125°58.4'	+	-	-	-	-	+	+	-	-
G	28 08	14 10	48°53.9'	128°58.9'	+	+	+	+	+	+	-	-	-
H	28 08	14 54	48"54.3'	125°58.4'	+	-	-	-	-	+	+	-	+
I	28 08	16 05	48"53.9'	125°58.4'	+	+	+	+	+	+	-	-	-
J	28 08	17 03	48°54.3'	125°58.4'	+	-	-	-	-	+	+	-	-
K	28 08	18 08	48"54.3'	125°58.4'	+	+	+	+	+	+	-	-	-
L	28 08	19 00	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-

CRUISE 7905 CONT'D

DATA TYPES AVAILABLE: "+" = available; "-" = not available

STN NO.	DATE DA/MO	TIME (PDT)	LAT	LONG	CTD	VARIO. CHL a	pH	O_2	NUTRI-ENTS	CHL a	^{14}C	PHYTO - PLANKTON	ZOO - PLANKTON
M	28 08	20 02	48°54.3'	125°58.4'	+	+	+	+	+	+	+	-	-
N	28 08	21 00	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-
O	28 08	22 03	48°54.3'	125°58.4'	+	+	+	+	+	+	+	-	-
P	28 08	22 03	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-
Q	29 08	00 05	48°54.3'	125°58.4'	+	+	+	+	+	+	+	-	+
R	29 08	00 53	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-
S	29 08	02 04	48°54.3'	125°58.4'	+	+	+	+	+	+	+	-	-
T	29 08	02 54	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-
U	29 08	04 04	48"54.3'	125°58.4'	+	+	+	+	+	+	+	-	-
V	29 08	04 57	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-
W	29 08	06 06	48°54.3'	125°58.4'	+	+	+	+	+	+	+	-	-
X	29 08	06 59	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-
Y	29 08	08 04	48°54.3'	125°58.4'	+	+	+	+	+	+	+	-	+
Z	29 08	08 58	48°54.3'	125°58.4'	+	+	-	-	-	+	-	-	-
AA	29 08	10 03	48°54.3'	125°58.4'	+	+	+	+	+	+	+	-	-
A02	22 08	16 09	49°07.2'	124°48.8'	+	+	-	+	+	+	-	-	-
A0	22 08	13 49	49°12.2'	124°49.0'	+	+	-	-	-	+	-	-	-
A1	22 08	14 44	49°09.9'	124°48.6'	+	+	-	-	-	+	-	-	-
A2	22 08	16 03	49°07.2'	124°48.8'	+	+	-	-	-	+	-	-	-
A3	22 08	16 34	49°05.5'	124°49.5'	+	+	-	-	-	+	-	-	-
A4	22 08	17 12	49°02.7'	124°51.1'	+	+	-	+	+	+	-	-	-
A5	22 08	18 16	48°59.6'	124°53.4'	+	+	-	-	-	+	-	-	-
A6	22 08	19 06	48°58.8'	124°57.8'	+	+	-	+	+	+	-	-	-
A7	22 08	19 47	48°57.0'	125°01.3'	+	+	-	-	-	+	-	-	-
A7A	23 08	01 53	48°57.0'	125°01.3'	+	+	-	-	-	+	-	-	-
A8	23 08	01 09	48°53.8'	125°03.1'	+	+	-	+	+	+	-	-	-
A9	23 08	00 20	48°51.5'	125°08.1'	+	+	-	-	-	+	-	-	-
A10	23 08	23 30	48°48.2'	125°14.4'	+	+	-	-	-	+	-	-	-
A11	22 08	20 24	48°57.6'	125°04.0'	+	+	-	+	+	+	-	-	-
A12	22 08	21 07	48°58.2'	125°07.8'	+	+	-	-	-	+	-	-	-
A13	22 08	22 04	48°54.2'	125°12.9'	+	+	-	+	+	+	-	-	-
A14	22 08	22 53	48°50.1'	125°15.8'	+	+	-	+	+	+	-	-	-

DATA BASE LISTING: CRUISE 79-03, STATION 2 TO STATION 48. PAGE 1
$ - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP $ (deg C)	SAL'TY$ (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
2	01	174.1	6.75	33.87	.11	2.18		33.60	2.72	52.80
2	02	151.4	6.92	33.83	.15	2.22		32.90	2.61	51.70
2	03	126.6	6.95	33.84		2.22		32.90	2.61	50.60
2	04	99.2	7.34	33.72						
2	05	73.1	7.82	33.36	.24	3.20		27.80	2.30	39.30
2	06	51.0	8.26	32.63	.71	4.38		24.00	2.12	37.20
2	07	27.3	9.02	32.01	7.39	5.88		18.50	1.81	30.00
2	08	19.2	9.19	31.98	20.35	7.49		10.60	1.18	21.20
2	09	8.7	10.80	31.83	19.44	10.59	90.5		.41	
2	10	.8	11.10	31.89	21.41	10.99	78.8		.40	
3	01	52.5	8.21	32.68	.65	5.05				37.60
3	02	30.3	9.15	32.02	8.31	6.43				24.90
3	03	19.9	9.61	31.92	21.57	7.77				14.40
3	04	10.0	10.82	31.92		10.33				1.30
3	05	6.2	10.90	31.94	24.70	10.63	103.7			1.30
3	06	.8	11.00	31.92	20.84	10.67	111.5			1.30
4	01	40.1	8.50	32.38		4.74		23.30	2.06	30.90
4	02	28.7	8.51	32.38		4.76		23.10	2.08	30.50
4	03	19.4	8.56	32.31		5.12		22.60	2.08	30.30
4	04	10.0	9.38	31.84		6.43		12.80	1.37	15.90
4	05	5.8	11.29	31.53	6.88	9.38	56.4	0.00	.27	.40
4	06	1.4	11.33	31.55	11.90	9.38	53.4	0.00	.26	.40
5	01	98.1	7.34	33.68	.26	2.34		30.60	2.58	40.00
5	02	73.8	8.07	33.07	.70	3.87		24.80	2.15	28.50
5	03	49.5	8.46	32.51	.33	4.61		22.10	2.02	27.60
5	04	30.5	9.21	32.17	.61	5.52		14.80	1.61	18.70
5	05	13.8	10.19	31.57	15.72	8.19		1.80	.48	2.20
5	06	10.2	11.19	31.24	8.35	8.09	24.0	0.00	.28	.60
5	07	20.7	10.02	31.62	6.49	6.77		6.90	.99	8.10
5	08	.9	11.68	31.13	5.71	8.11	17.8	0.00	.26	.40
6	01	100.2	6.70	33.87	.05	2.10		33.20	2.65	42.00
6	02	74.2	8.12	33.03		3.90		25.10	2.14	27.40
6	03	51.0	8.75	32.37		5.52		17.50	1.79	22.70
6	04	28.8	10.63	31.81	21.88	8.81		1.20	.54	1.90
6	05	20.7	10.90	31.79	19.02	9.18	90.1	.50	.45	1.00
6	06	7.7	11.89	31.21	5.22	8.63		0.00	.22	.40
6	07	5.1	11.99	31.13	4.68	8.60	17.0	0.00	.19	.40
7	01	129.4	7.00	33.86	.05	2.25		32.90	2.78	49.40
7	02	101.9	7.64	33.66		3.02		28.60	2.37	38.10
7	03	75.4	7.98	33.32		4.13		22.60	1.98	26.40
7	04	48.5	8.26	32.61		4.63		19.90	1.97	29.00
7	05	30.2	9.38	32.21		5.97		6.60	1.11	13.80
7	06	19.5	10.80	32.02	.94	6.71	1.2	0.00	1.38	.90
7	07	9.5	12.07	31.45		6.75		0.00	.30	.90
7	08	6.7	12.35	31.38	.52	6.81	1.7	0.00	.25	.90
8	01	174.1	7.09	33.91		2.48		32.00	2.39	45.80
8	02	151.6	7.23	33.85		2.51		31.40	2.58	44.10
8	03	122.0	7.73	33.73	.04	3.83		28.40	2.32	37.20
8	04	99.5	7.92	33.51		3.69		25.50	2.15	32.00
8	05	72.3	8.12	33.17		4.51		20.10	1.88	22.70
8	06	48.5	8.40	32.69		5.99		8.00	1.08	14.30
8	07	28.8	9.77	32.42		6.76		.70	.54	7.30
8	08	20.9	11.21	32.11	.47	6.62	1.7	0.00	.38	7.30
8	09	9.7	11.46	32.05		6.78		0.00	.45	6.70
8	10	5.9	11.68	32.06	.02	6.61	1.1	0.00	.44	7.10
9	01	5.0				6.48		0.00	.37	9.50

DATA BASE LISTING: CRUISE 79-03, STATION 2 TO STATION 48. PAGE 2
$ - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP $ (deg C)	SAL'TY$ (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
9	02	10.0			.18	6.49	.9	0.00	.44	9.10
9	03	20.0				6.62		0.00	.46	9.50
9	04	30.0			.31	6.64	.5	4.40	.76	11.20
9	05	50.0				5.71		9.80	1.10	14.00
9	06	75.0				4.24		23.10	1.85	27.40
9	07	100.0				3.48		26.70	2.10	34.00
9	08	125.0				3.29		28.00	2.20	39.20
10	01	175.5	7.19	33.88		4.35		32.20	2.44	45.30
10	02	149.4	7.39	33.89		2.84		30.70	2.39	41.40
10	03	122.7	7.49	33.75		3.67		28.60	2.24	37.80
10	04	97.0	7.85	33.50						
10	05	74.5	7.84	33.08		4.97		18.50	1.64	21.90
10	06	48.9	8.42	32.55		6.70		6.00	.94	12.40
10	07	30.9	8.95	32.49	.27	7.08	.9	2.60	.73	11.30
10	08	20.1	10.62	32.36		6.71		0.00	.52	10.20
10	09	11.5	11.24	32.18	.14	6.60	1.0	0.00	.54	9.80
10	10	8.0	11.38	32.21		6.59		0.00	.53	9.80
11	01	149.8	7.07	33.79		2.28		33.20	2.61	48.60
11	02	121.9	7.34	33.82		3.22		30.90	2.43	43.80
11	03	96.1	7.77	33.59		3.72		27.90	2.27	36.30
11	04	75.0	8.12	33.17		4.13		20.80	1.96	29.50
11	05	52.3	8.70	32.56		5.73		8.60	1.24	13.90
11	06	29.8	9.38	32.24		6.23		4.90	.99	7.70
11	07	21.4	10.73	31.78	1.10	6.99	3.8	.30	.39	1.30
11	08	12.2	11.63	31.58		6.99		0.00	.29	.90
11	09	5.8	11.97	31.54	.49	6.87	1.7	0.00	.29	.90
12	01	74.6	7.95	33.18	14.08	3.38		27.20	2.30	40.80
12	02	51.3	8.40	32.56		4.45		23.60	2.11	35.10
12	03	30.4	9.02	32.01		5.70		17.20	1.77	26.60
12	04	18.7	9.68	31.85		6.82		7.70	1.14	9.70
12	05	14.3	9.96	31.76	16.25	8.09	11.4	1.80	.57	2.60
12	06	9.7	10.61	31.77		8.64		.60	.36	1.30
12	07	5.1	11.82	31.21		8.05	54.5	.20	.22	.90
13	01	48.4	8.48	32.48		4.89		22.20	2.07	32.80
13	02	28.6	9.09	31.85		5.77		16.80	1.75	25.80
13	03	20.8	10.02	31.47		6.79		7.00	.95	11.20
13	04	16.2	10.43	31.40	3.03	7.47	26.8	2.10	.48	4.60
13	05	11.1	12.02	31.09	2.49	8.16		0.00	.21	.90
13	06	4.9	12.21	30.94	2.47	7.96	8.9	0.00	.20	.90
14	01	100.1	8.03	33.06		3.53		26.10	2.29	40.10
14	02	74.9	8.12	32.94		3.77		25.20	2.21	37.70
14	03	47.2	8.41	32.56		4.52		22.00	2.06	32.50
14	04	30.8	8.90	32.11		5.64		19.70	1.94	29.60
14	05	20.7	8.89	31.90		5.84		19.10	1.91	29.20
14	06	8.0	11.24	31.35	5.49	7.64	15.9	.70	.35	2.00
14	07	4.6	12.41	31.05	3.48	7.91	9.9	.10	.21	.90
15	01	72.0	8.26	32.68		4.17		24.60	2.14	37.40
15	02	52.7	8.42	32.55		4.71		22.90	2.05	34.30
15	03	30.9	8.99	32.16		5.47		16.80	1.79	24.80
15	04	20.4	10.63	31.45	11.00	7.94	30.5	.70	.40	2.20
15	05	10.8	12.19	31.07		7.91		0.00	.19	.70
15	06	5.5	12.56	31.06	1.43	7.80	3.9	0.00	.17	.70
16	01	30.3	9.12	32.12		5.56		14.70	1.56	23.70
16	02	19.9	9.67	31.96		6.04		4.00	.76	6.40
16	03	16.3	10.46	31.72	14.71	7.01	4.4	1.00	.57	2.40
16	04	10.0	11.49	31.46		7.89		0.00	.23	.90

DATA BASE LISTING: CRUISE 79-03, STATION 2 TO STATION 48. PAGE 3
*** - Indicates that data is from an electronic sensor.**

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
16	05	5.4	12.14	31.32	1.38	7.89	43.4	0.00	.18	.90
17	01	40.2	8.38	32.51		4.58		21.60	2.04	33.60
17	02	32.4	8.68	32.30		4.91		20.10	1.95	29.70
17	03	20.8	9.23	32.05		5.52		13.30	1.58	14.50
17	04	18.0	10.07	31.77	15.60	6.66	34.2	4.30	.69	1.50
17	05	10.7	11.70	31.32		7.60		.10	.23	.40
17	06	3.4	12.02	31.22	1.47	7.59	4.0	0.00	.31	.40
17a	01	49.7	8.21	32.67						
17a	02	49.4	8.21	32.67		4.21		23.40	2.10	35.50
17a	03	28.7	8.50	32.47		4.74		21.10	2.00	30.90
17a	04	19.4	9.97	32.02		7.00		2.10	.54	2.60
17a	05	18.7	11.19	31.49	6.92	7.40	16.9	.20	.32	.70
17a	06	10.1	11.80	31.40		7.65		0.00	.20	.40
17a	07	5.9	12.18	31.33	1.72	7.60	5.1	0.00	.18	.40
18	01	50.2	8.38	32.71		5.08		14.60	1.69	20.30
18	02	30.6	8.46	32.64		5.22		12.80	1.54	17.90
18	03	19.4	9.12	32.32		5.97		5.70	1.06	8.30
18	04	12.7	10.06	32.15	2.20	6.66	4.8	1.90	.71	2.60
18	05	6.1	11.47	31.45	.92	7.18	8.0	.20	.28	.70
18	06	.7	12.60	31.54		7.15		.10	.21	.40
19	01	100.9	7.92	33.40		3.67		25.00	2.10	33.20
19	02	76.8	8.21	33.08		4.68		18.90	1.71	23.60
19	03	38.1	8.48	32.62		5.38		12.10	1.42	17.10
19	04	30.4	8.87	32.36						
19	05	21.1	10.43	32.27	.26	6.77	3.5	.50	.39	3.30
19	06	10.1	11.72	31.76		6.82		0.00	.32	2.20
19	07	8.1	11.82	31.76	.02	6.81	2.0	0.00	.30	2.20
20	01	175.7	6.99	33.85		2.86		31.50	2.33	45.70
20	02	149.9	7.09	33.77		3.51		30.10	2.27	42.80
20	03	126.2	7.40	33.83		3.59		29.40	2.26	39.70
20	04	99.7	7.53	33.64		3.75		26.70	2.07	34.20
20	05	74.6	7.85	33.33		4.39		22.90	1.83	27.00
20	06	48.9	7.99	32.88		5.45		1.90	.62	11.20
20	07	28.7	9.14	32.40		6.69		1.70	.61	11.00
20	08	20.2	10.63	32.00	.66	6.81	2.4	.20	.41	7.00
20	09	10.1	11.60	31.85	.30	6.83	1.4	0.00	.33	5.30
20	10	6.2	11.94	31.92		6.66		0.00	.31	4.80
21	01	175.0	7.27	33.93		2.69		31.50	2.35	44.50
21	02	152.4	7.50	33.82		2.86		30.60	2.33	41.20
21	03	124.4	7.68	33.66		3.32		28.70	2.19	37.20
21	04	99.0	7.77	33.49		4.00		25.40	1.96	30.70
21	05	73.5	7.87	33.17		4.26		21.10	1.70	24.80
21	06	45.6	8.26	32.60		6.19		8.40	.97	14.60
21	07	27.0	10.02	32.20	.30	7.11	.9	.40	.50	9.80
21	08	19.6	11.21	31.93		6.93		0.00	.36	4.40
21	09	9.2	11.82	31.76	.33	6.74	1.5	0.00	.30	2.80
21	10	7.2	12.26	31.71		6.74		0.00	.29	2.80
22	01	161.0	6.75	33.92		2.16		33.90	2.50	52.30
22	02	150.9	6.82	33.92						
22	03	126.8	7.39	33.84	0.00					
22	04	100.0	7.78	33.57	0.00	3.34		28.10	2.15	34.20
22	05	74.7	7.92	33.35		4.11		23.90	1.87	28.10
22	06	50.3	8.19	32.76		5.51		13.10	1.29	17.40
22	07	28.6	9.87	32.24						
22	08	17.7	10.65	31.96	.56	6.81	2.1	.30	.43	5.70
22	09	9.6	12.30	31.82						

DATA BASE LISTING: CRUISE 79-03, STATION 2 TO STATION 48. PAGE 4
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SIO4 (uM/l)
22	10	5.4	12.60	31.82	.21	6.66	1.7	.20	.36	4.60
23	01	121.0	6.65	33.89				33.60	2.70	57.10
23	02	100.0	7.19	33.69				31.30	2.52	47.30
23	03	76.6	7.78	33.40				28.40	2.31	40.50
23	04	49.5	8.35	32.61				23.90	2.07	34.90
23	05	30.0	8.74	32.16				20.50	1.97	30.30
23	06	20.2	9.09	31.80				17.50	1.81	26.60
23	07	12.5	9.94	31.53	10.63		19.7	8.00	1.08	12.20
23	08	2.1	12.21	31.06	3.00		8.4	.20	.25	.90
24	01	104.8	7.00	33.82	33.86			32.80	2.53	51.40
24	02	99.7	7.09	33.79				32.40	2.55	49.90
24	03	76.1	7.84	33.29				27.40	2.24	38.80
24	04	51.6	8.31	32.65				24.40	2.10	36.20
24	05	30.6	8.70	32.23				18.50	1.82	27.50
24	06	18.3	10.02	31.62	4.30		9.7	4.70	.94	7.40
24	07	9.6	12.01	31.11				.20	.26	.90
24	08	6.5	12.28	31.04	2.58		6.2	.10	.20	.70
25	01	123.3	6.73	33.85				33.90	2.67	55.00
25	02	98.2	7.29	33.73				31.60	2.52	47.30
25	03	72.1	7.92	33.23				27.60	2.27	38.80
25	04	48.5	8.42	32.55				23.40	2.11	34.00
25	05	29.8	9.18	32.03				15.20	1.62	22.70
25	06	18.0	10.38	31.78	13.45		45.3	.50	.40	1.50
25	07	11.0	12.07	31.25				.30	.58	.90
25	08	7.2	12.35	31.14	3.61		13.2	.20	.23	.70
26	01	121.9	6.75	33.87	33.90			33.60	2.72	56.70
26	02	99.8	7.29	33.72				31.70	2.52	47.80
26	03	72.2	7.53	33.50				30.00	2.42	43.40
26	04	50.5	8.31	32.82				23.90	2.12	35.80
26	05	28.7	9.29	32.44				12.50	1.36	20.90
26	06	17.2	10.53	32.12	20.67		83.3	1.60	.48	3.70
26	07	10.1	10.94	32.02				.70	.37	1.50
26	08	6.6	11.02	31.95	20.37		78.5	.80	.36	1.70
27	01	67.7	7.96	33.24				22.40	1.90	29.30
27	02	49.4	8.12	33.00				24.40	2.10	35.40
27	03	32.5	8.66	32.32				22.00	2.04	32.50
27	04	14.1	10.33	31.71	12.96		44.8	1.00	.35	2.40
27	05	6.7	11.86	31.35				.30	.29	1.10
27	06	5.7	11.89	31.32			16.7			
28	01	60.7	8.21	32.86				26.70	2.14	35.80
28	02	48.1	8.31	32.65				24.90	2.14	35.10
28	03	29.7	8.66	32.34				20.50	1.94	31.60
28	04	12.0	11.14	31.42	6.08		23.3	1.80	.46	2.80
28	05	5.5	12.01	31.11	4.08		13.3	.40	.22	.90
29	01	74.4	8.26	32.85				18.50	1.62	22.00
29	02	50.1	8.66	32.45				20.90	1.94	32.30
29	03	30.6	9.14	32.12				14.90	1.58	24.40
29	04	21.2	10.26	31.93	18.67		57.7	3.00	.62	5.40
29	05	10.6	12.12	31.02				.20	.24	.90
29	06	6.9	12.21	31.06	2.83		9.6	.20	.23	.90
30	01	76.8	8.17	33.11				20.50	1.82	27.70
30	02	49.3	8.51	32.47				14.70	1.49	21.80
30	03	30.4	9.13	32.25				14.20	1.53	22.20
30	04	20.7	9.52	31.90				11.80	1.47	17.40
30	05	12.7	11.10	31.79	8.50		11.8	2.00	.44	3.90
30	06	5.8	12.46	31.34	4.15		10.3	1.80	.44	4.10

DATA BASE LISTING: CRUISE 79-03, STATION 2 TO STATION 48. PAGE 5
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
31	01	99.7	7.41	33.65				30.70	2.48	45.60
31	02	72.4	8.03	33.18				26.10	2.19	35.10
31	03	46.8	8.40	32.69				23.40	2.13	35.40
31	04	27.4	8.68	32.32				20.30	1.98	31.20
31	05	18.9	9.36	32.37				11.70	1.29	19.30
31	06	10.7	10.26	32.19	31.56		106.7	1.50	.50	5.00
31	07	3.4	10.61	31.96	22.54		95.4	.50	.40	2.80
32	01	96.6	7.20	33.69				31.90	2.56	49.40
32	02	74.3	7.73	33.54				28.10	2.16	39.70
32	03	50.8	8.24	32.88				24.60	2.08	35.80
32	04	26.6	8.96	32.24				17.00	1.67	27.70
32	05	18.8	9.85	32.02				5.70	.92	10.60
32	06	12.2	10.73	32.01	26.62		87.7	.90	.41	3.50
32	07	3.4	11.14	31.63	13.84		47.2	.20	.31	1.70
33	01	96.7	7.01	33.82				32.60	2.59	51.00
33	02	71.8	7.65	33.55				28.00	2.39	40.00
33	03	50.1	8.44	32.53				23.50	2.15	34.80
33	04	27.8	8.82	32.31				18.90	1.83	28.50
33	05	18.6	9.94	31.93				3.60	.70	6.50
33	06	12.0	11.11	31.78	10.97		42.2	.30	.29	1.30
33	07	2.7	11.69	31.38	7.23		29.6	.10	.26	1.10
34	01	98.6	6.86	33.85				33.40	2.66	54.20
34	02	74.5	7.49	33.58				30.40	2.44	44.80
34	03	46.5	8.44	32.53				23.70	2.04	34.20
34	04	27.7	8.88	32.04				20.30	1.93	30.50
34	05	19.1	10.68	31.73				2.30	.48	3.50
34	06	12.0	11.75	31.48	7.23		24.9	.20	.24	.90
34	07	5.6	12.11	31.34	4.70		16.9	.10	.20	.90
35	01	98.9	7.49	33.64				29.80	2.37	43.50
35	02	73.2	7.99	33.10				26.90	2.22	38.30
35	03	50.0	8.43	32.52				24.00	2.08	35.20
35	04	27.5	8.89	32.11				19.00	1.87	27.60
35	05	18.6	10.13	31.53				8.30	1.03	12.20
35	06	9.7	12.24	31.23	3.98		13.0	.30	.23	1.10
35	07	5.0			3.79		11.8	.20	.22	1.10
36	01	100.0	7.04	33.76				32.30	2.62	51.70
36	02	72.8	8.10	33.05				26.10	2.19	37.00
36	03	51.5	8.34	32.62					2.19	
36	04	28.8	9.16	32.10				.60	1.72	2.00
36	05	12.7	10.85	31.80	19.39		75.1	16.20	.43	26.70
36	06	7.4	11.95	31.38				0.00	.24	1.10
36	07	6.8	11.89	31.40	5.16		22.2	0.00	.25	1.10
37	01	97.8	6.82	33.83				33.40	2.65	54.40
37	02	97.8						33.60	2.65	54.40
37	03	97.8						33.60	2.67	54.70
37	04	67.7	7.73	33.42				29.00	2.34	40.90
37	05	48.1	8.21	33.09				23.50	2.00	33.80
37	06	31.0	8.36	32.61	.70			21.30	1.87	30.30
37	07	18.5	9.68	32.41	16.68		63.5	7.50	1.18	13.10
37	08	10.6	10.12	32.23	27.55			2.30	.62	5.20
37	09	4.2	11.04	31.72	16.97		57.9	.40	.34	2.80
38	01	99.6	6.84	33.83				33.70	2.63	54.70
38	02	74.2	7.39	33.64				31.10	2.49	46.40
38	03	46.2	8.12	33.08				23.50	1.99	31.60
38	04	27.1	8.89	32.51				17.80	1.65	26.80
38	05	18.9	9.07	32.41				16.00	1.56	24.40

DATA BASE LISTING: CRUISE 79-03, STATION 2 TO STATION 48. PAGE 6
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
38	06	9.6	9.87	32.32	17.44		62.1	5.20	.73	10.90
38	07	3.0	10.21	32.31	18.83		45.9	1.70	.50	7.20
39	01	97.6	7.02	33.82				32.90	2.61	51.40
39	02	71.8	7.39	33.67				31.20	2.51	47.30
39	03	49.0	7.92	33.29				25.70	2.14	35.50
39	04	30.7	8.46	32.94				21.40	1.90	32.50
39	05	17.9	9.06	32.52				16.60	1.61	27.50
39	06	8.5	9.68	32.28	20.75		69.6	7.70	1.15	17.00
39	07	3.5	10.21	31.98	25.36		63.3	2.20	1.02	12.00
40	01	100.1	6.88	33.82				33.00	2.60	53.70
40	02	74.1	7.53	33.59				28.70	2.35	40.20
40	03	45.8	7.85	33.36				26.70	2.21	37.40
40	04	29.4	8.26	32.94				23.70	2.06	34.30
40	05	19.5	8.70	32.71				19.30	1.78	30.20
40	06	8.4	9.38	32.33	25.03		72.7	13.00	1.41	21.70
40	07	4.6	10.26	32.08	30.21		91.0	2.30	.61	10.20
41	01	99.9	7.21	33.67				31.30	2.53	48.90
41	02	72.0	7.21	33.68				31.30	2.56	48.00
41	03	52.9	7.60	33.53				28.60	2.38	41.90
41	04	30.8	8.26	33.09				23.00	2.01	33.60
41	05	19.2	8.80	32.81				17.90	1.69	27.10
41	06	12.0	9.48	32.47	21.20		79.8	7.00	1.03	15.20
41	07	4.5	10.36	32.21	22.18		80.0	2.00	.71	10.80
42	02	101.7	7.40	33.61				30.80	2.55	46.80
42	03	72.8	7.83	33.31				26.60	2.24	37.90
42	04	47.3	8.56	32.82				20.30	1.94	29.80
42	05	21.5	8.73	32.40				19.50	1.89	31.70
42	06	30.6	8.76	32.47				19.90	1.90	31.10
42	07	9.6	9.99	32.01	25.74		70.1	4.70	.85	11.00
42	08	3.4	10.30	31.86	28.25		76.9	2.10	.58	6.60
43	01	87.6	7.85	33.31				27.10	2.30	40.10
43	02	73.3	8.24	33.10				23.30	2.13	34.20
43	03	50.2	8.26	32.93				23.10	2.20	34.40
43	04	31.2	8.51	32.60				22.20	2.21	34.00
43	05	19.1	9.34	32.06				13.40	1.37	22.90
43	06	9.1	9.87	32.01	38.53		144.2	2.50	.63	7.40
43	07	4.3	10.32	31.99	29.26		122.2	1.90	.52	7.00
44	01	74.3	7.72	33.40				27.50	2.36	40.00
44	02	48.8	8.29	32.79				24.10	2.27	35.90
44	03	27.2	9.27	32.13				15.10	1.66	24.80
44	04	19.0	9.44	32.07				12.40	1.33	21.10
44	05	10.1	9.67	32.08	23.88		80.5	8.70	1.18	18.10
44	06	4.6	9.80	32.06	23.43		94.8	7.50	.98	16.80
45	01	30.1	8.56	32.43				22.50	2.12	34.70
45	02	21.5	8.70	32.43				21.30	2.04	33.90
45	03	8.3	9.48	32.03	17.50		75.0	10.60	1.36	22.40
45	04	3.4	9.97	31.76	21.90		35.7	5.80	1.15	18.50
46	01	49.9	8.21	32.95				23.90	2.16	36.00
46	02	28.1	8.66	32.46				22.00	2.01	34.20
46	03	17.3	8.90	32.06				21.50	2.06	34.70
46	04	10.4	9.58	31.85	21.45		57.6	8.90	1.25	21.30
46	05	2.6	10.19	31.74	17.73		52.0	4.10	1.10	16.20
47	01	149.1	7.25	33.74				31.60	2.59	48.40
47	02	119.6	7.41	33.60				30.30	2.52	45.90
47	03	100.5	7.70	33.43				28.40	2.38	41.40
47	04	73.9	7.92	33.00				26.80	2.39	40.70

DATA BASE LISTING: CRUISE 79-03, STATION 2 TO STATION 48. PAGE 7
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SIO4 (uM/l)
47	05	50.5	8.38	32.58				24.50	2.22	36.90
47	06	29.5	8.80	32.11				22.90	2.08	36.40
47	07	21.2	8.84	32.02	3.39		14.1	22.30	2.07	35.60
47	08	10.2	9.29	31.94	12.96		52.5	16.30	1.76	28.20
47	09	5.7	10.07	31.84				4.50	1.12	17.30
48	01	142.7	6.80	33.84				33.80	2.70	53.50
48	02	124.8	7.25	33.75				31.70	2.55	45.00
48	03	100.7	7.56	33.54				29.50	2.46	41.00
48	04	76.7	7.87	33.05				28.20	2.44	41.40
48	05	48.0	8.31	32.65				25.60	2.26	37.40
48	06	30.5	8.66	32.34				23.00	2.21	35.20
48	07	18.5	9.48	32.03				6.40	1.16	17.90
48	08	7.6	9.94	31.95	23.23		94.2	6.10	1.14	20.80
48	09	3.1	9.92	31.97	21.20		82.7	5.70	1.07	20.10

DATA BASE LISTING: CRUISE 79-04, STATION 1 TO STATION 47. PAGE 1
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
1	01	151.2				1.97		33.90	2.85	56.80
1	02	124.8				4.35		34.20	2.82	56.50
1	03	100.0				1.82		34.50	2.80	57.30
1	04	75.0				2.66		31.20	2.60	50.50
1	05	50.0				4.41		25.10	2.27	42.90
1	06	30.0				4.77		22.80	2.17	41.50
1	07	20.0				4.61		22.80	2.13	40.00
1	08	10.0			2.37	5.12	9.1	20.80	2.01	39.20
1	09	4.0			2.25	5.38	10.4	20.30	1.97	39.10
2	01	249.1	6.32	33.97		2.19				
2	02	199.4	6.79	33.97		2.54		41.60	2.57	48.20
2	03	147.8	7.33	33.85		2.79		36.90	2.43	41.90
2	04	121.0	7.47	33.71		3.27		29.20	2.25	37.30
2	05	96.4	7.49	33.44		4.06		25.20	2.02	31.80
2	06	69.3	7.57	32.85		4.93		19.30	1.73	25.50
2	07	44.9	8.21	32.61		6.11		11.30	1.21	15.40
2	08	24.9	11.62	32.55	.68	6.40	2.3	3.80	.86	9.30
2	09	16.4	12.69	32.02		6.59		11.60	.51	7.70
2	10	2.5	13.03	32.18	.42	6.54	2.4	.60	.49	6.90
3	01	251.6	5.92	33.97		1.93		37.10	2.95	60.00
3	02	196.8	6.53	33.92		2.23		35.20	2.65	52.70
3	03	146.2	6.98	33.90		2.48		33.10	2.48	46.20
3	04	119.7	7.30	33.83		2.86		31.10	2.44	41.80
3	05	95.7	7.35	33.60		3.97		26.20	2.06	34.10
3	06	71.7	7.61	33.28		4.23		23.50	1.91	30.00
3	07	43.8	8.05	32.77		5.84		13.10	1.30	16.60
3	08	25.0	11.14	32.71	1.10	6.47		2.70	.71	6.10
3	09	13.3	12.97	32.19		6.63		.10	.47	4.50
3	10	7.0			.27	6.60	1.5	0.00	.48	5.70
4	01	133.0	6.60	33.91		1.91		35.40	2.74	52.40
4	02	119.7	6.79	33.85		1.51		36.80	3.04	56.80
4	03	94.7	6.99	33.70		1.77		35.50	2.80	51.80
4	04	71.8	7.37	33.57		3.10		29.80	2.30	38.30
4	05	47.0	7.82	33.03		3.77		24.40	2.02	30.60
4	06	25.2	8.81	32.50		3.99		25.80	2.24	38.50
4	07	16.4	9.58	33.10	2.13	5.21	6.6	17.70	1.69	25.20
4	08	4.2	12.50	32.20	1.23	6.68	7.6	1.40	.60	7.50
5	01	110.6	6.44	33.91		1.18		37.70	3.13	64.80
5	02	100.0				1.36		37.60	3.02	60.00
5	03	75.0				1.65		36.60	3.03	55.90
5	04	50.0				2.12		34.10	2.76	48.40
5	05	30.0				2.91		31.00	2.55	42.50
5	06	20.0				4.02		25.80	2.21	38.10
5	07	10.0			2.74	6.96		10.80	1.11	29.20
5	08	3.0			2.54	7.12		9.90	1.03	29.20
6	01	111.6	6.46	33.91		1.40		35.40	3.10	62.10
6	02	97.1	6.49	33.89		1.42		35.70	3.11	60.40
6	03	72.0	6.94	33.83		1.84		33.60	2.88	51.50
6	04	47.5	7.30	33.65		2.26		32.00	2.76	47.30
6	05	27.8	8.28	33.11		3.38		27.60	2.50	42.20
6	06	15.2	9.52	32.38		5.21		15.20	1.72	26.30
6	07	5.8	11.18	33.09	6.31	7.73	21.9	5.10	.90	19.00
6	08	3.9	12.54	32.32	1.99	7.55	9.5	5.40	.90	20.20
7	01	72.0	6.88	33.75		1.88		35.90	2.83	54.70
7	02	52.9	7.68	33.33						
7	03	29.5	9.09	32.41		4.23		27.00	2.30	43.50

DATA BASE LISTING: CRUISE 79-04, STATION 1 TO STATION 47. PAGE 2
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
7	04	19.1	9.36	32.35		4.81		25.60	2.17	42.10
7	05	7.7	10.31	32.12	2.69	6.06	13.0	19.60	1.83	37.20
7	06	6.0	10.76	31.74	1.47	5.96	7.9	19.90	1.83	36.80
8	01	46.1	8.47	32.79		3.40	4.5	29.70	2.51	46.30
8	02	30.3	8.70	32.61		3.43		29.10	2.42	45.30
8	03	20.0				4.11		28.20	2.36	44.20
8	04	8.8	9.45	32.24	1.15	4.57		25.30	2.17	41.20
8	05	5.9	9.66	31.85	1.95	4.82	8.0	24.00	2.11	40.10
9	01	86.7	8.10	33.03		3.13		30.50	2.60	47.10
9	02	68.4	8.78	32.63		3.68		30.00	2.40	44.10
9	03	42.9	9.24	32.43		4.34		36.70	2.27	41.50
9	04	26.9	9.51	32.34		4.84		25.10	2.14	39.40
9	05	15.8	9.89	32.28		5.49		22.80	1.93	38.20
9	06	5.4	10.35	32.27	2.66	5.61	10.1	19.40	1.69	36.80
9	07	4.2	11.06	32.20	2.15	6.83	10.9	17.30	1.54	36.20
10	01	126.0	7.56	33.39		2.16		32.80	2.84	52.90
10	02	99.3	7.84	33.23		2.57		31.90	2.66	48.30
10	03	73.0	8.09	33.07		2.83		31.10	2.52	47.50
10	04	46.3	8.35	32.85		3.25		30.20	2.62	46.30
10	05	28.6	8.82	32.48		3.81		28.60	2.40	45.10
10	06	19.9	8.92	32.52		4.02		28.20	2.37	44.00
10	07	9.9	9.48	32.10	1.03	4.37	6.5	25.80	2.19	41.80
10	08	5.2	11.54	31.42	1.62	5.53	7.4	21.50	1.92	37.80
11	01	59.8	7.53	33.44		2.23		33.10	2.74	51.20
11	02	50.4	7.75	33.25		2.45		32.20	2.66	47.90
11	03	29.3	7.96	33.22		2.75		31.40	2.59	46.30
11	04	19.9	8.25	32.99		3.13		30.70	2.51	45.10
11	05	8.3	8.89	32.55	1.44	4.11	19.8	27.10	2.27	42.70
11	06	4.0	9.47	32.32	3.48	5.16	8.6	22.60	1.94	38.80
12	01	49.8	7.91	33.11		2.50		32.20	2.64	47.60
12	02	30.8	8.26	32.95		3.24		30.40	2.53	46.00
12	03	20.0	8.55	32.86		3.66		29.30	2.40	44.20
12	04	9.2	9.47	32.44		4.89		24.30	2.03	40.10
12	05	6.5	9.52	32.39	4.19	5.00	18.6	23.90	2.02	39.70
12	06	3.3	9.72	32.33	3.81	5.24	21.4	22.90	1.93	38.90
13	01	76.2	7.73	33.26		2.38		32.00	2.69	49.50
13	02	47.5	8.06	33.07		2.59		31.60	2.65	46.10
13	03	27.3	8.50	32.73		2.79		27.80	2.46	42.20
13	04	17.0	9.64	32.39		5.42		16.10	1.64	24.70
13	05	6.1	11.43	32.19	15.80	8.73	48.3	1.40	.38	2.90
13	06	3.0	12.84	32.06	8.30	9.56	28.4	.10	.23	1.00
14	01	107.5	6.69	33.80		1.01		36.20	3.22	63.80
14	02	101.2	6.74	33.75		1.02		36.50	3.22	62.20
14	03	75.1	7.24	33.13		1.51		35.00	3.02	51.20
14	04	51.3	8.08	33.10		2.87		30.70	2.61	44.10
14	05	30.3	8.99	32.53		3.95		27.00	2.37	41.30
14	06	18.7	9.48	32.31		4.83		21.20	2.04	32.30
14	07	14.5	10.90	32.33	4.44	7.28	17.1	5.60	.82	8.50
14	08	3.0			2.97	7.35	11.4	.50	.40	4.50
15	01	176.0	6.60	33.93		1.91		35.30	2.72	52.80
15	02	150.5	6.90	33.95		2.53		33.40	2.57	46.90
15	03	123.1	7.33	33.85		2.93		31.20	2.46	41.70
15	04	100.9	7.35	33.61		3.38		28.80	2.30	38.00
15	05	74.8	7.53	33.44		4.04		25.10	2.08	31.20
15	06	45.0	8.26	32.72		4.70		18.00	1.74	23.40
15	07	29.5	10.15	32.28		6.26		6.60	1.10	9.90

DATA BASE LISTING: CRUISE 79-04, STATION 1 TO STATION 47. PAGE 3
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
15	08	19.7	11.64	32.32	.72	6.79	4.0	.70	.59	3.70
15	09	6.9	13.61	32.31		6.53		0.00	.48	3.30
15	10	6.5	13.90	32.25	2.79	6.51	2.0	0.00	.48	3.10
16	01	175.0	6.83	33.99		2.74		33.80	2.55	47.00
16	02	150.7	6.99	33.95		2.67		33.40	2.49	45.20
16	03	150.7	6.99	33.95		2.80		35.80	2.42	41.70
16	04	94.6	7.38	33.72		3.21		46.10	2.32	38.30
16	05	63.1	7.68	33.25		3.78		35.30	2.10	32.80
16	06	42.5	8.24	32.78		4.66		19.80	1.82	23.90
16	07	27.5	9.65	32.59		5.57		11.30	1.33	15.40
16	08	15.3	11.54	32.37	1.70	7.21	6.1	1.90	.67	4.30
16	09	5.4	13.27	32.07		7.15		1.10	.57	7.90
16	10	5.8	13.30	32.06	1.19	6.72	7.4	.90	.59	8.10
17	01	115.7	6.74	33.93		1.67		35.40	2.90	55.90
17	02	100.8	7.22	33.85		2.19		36.30	2.63	49.80
17	03	73.4	7.56	33.43		3.09		28.60	2.34	37.20
17	04	49.4	8.00	33.14		2.98		28.20	2.38	38.10
17	05	29.1	9.70	32.53		5.50		10.20	1.29	15.80
17	06	16.7	11.62	32.28	1.86	6.50	8.0	2.30	.71	5.10
17	07	7.1	13.26	32.28		6.66		.20	.55	4.70
17	08	5.1	13.41	32.17	.44	6.63	3.1	0.00	.52	5.10
18	01	80.3	7.47	33.44		1.91		33.00	2.91	52.00
18	02	66.5	7.94	33.19		2.83		31.20	2.61	45.70
18	03	24.8	10.03	32.23	4.29	5.27	15.1	18.10	1.76	27.10
18	04	16.3	10.98	32.16		6.29		8.50	1.10	13.60
18	05	4.5	12.71	32.65		6.76		.90	.53	6.50
18	06	3.5	13.21	32.32	1.45	6.91	7.5	.50	.50	6.50
19	01	60.4	7.82	33.18		2.33		32.60	2.78	50.90
19	02	49.5	8.11	33.00		2.71		32.00	2.69	47.00
19	03	28.5	8.47	32.75		3.10		30.10	2.53	42.20
19	04	16.0	8.95	32.53		3.73		26.60	2.37	38.10
19	05	6.3	11.81	32.16	15.48	7.59	40.4	6.00	.71	8.30
19	06	5.9	11.72	32.05	10.72	8.63	39.6	1.40	.34	2.40
20	01	44.8	8.13	33.02		2.71		31.30	2.76	48.30
20	02	26.1	8.16	33.11		3.69		29.70	2.56	44.60
20	03	10.1	8.93	32.54		4.24		27.10	2.43	42.40
20	04	7.5	11.45	32.11	5.51	6.21	19.6	19.00	1.82	36.50
20	05	2.8	11.56	32.07	5.48	6.29	28.7	18.70	1.79	36.90
20	06	2.9	11.57	32.08						
21	01	40.8	8.72	32.59		3.68		28.60	2.49	44.20
21	02	11.7	9.91	32.27		5.09		23.20	2.03	38.40
21	03	3.6	11.47	31.57	3.94	6.17	18.1	19.50	1.80	36.00
21	04	3.8	11.42	31.58	2.78	6.02	17.4	19.50	1.79	35.80
22	01	81.1	8.30	32.93		3.10		29.80	2.50	45.20
22	02	66.6	8.60	32.69		3.21		28.60	2.46	42.60
22	03	48.6	8.74	32.63		3.46		27.60	2.47	41.80
22	04	27.6	9.17	32.38		4.28		25.40	2.28	39.80
22	05	17.7	9.96	32.22		5.64		22.10	1.96	38.00
22	06	7.2	11.82	32.00	8.37	7.28	25.9	12.90	1.26	29.80
22	07	3.4	12.04		6.85	7.07	28.1	13.60	1.35	32.00
23	01	17.1	10.45	31.95	1.17		5.9			
24	01	6.2	11.64	32.27	1.29		5.8			
25	01	8.2	11.37	32.35	1.40		6.4			
26	01	6.8	11.45	32.37	1.21		6.5			
27	01	7.5	10.88	32.34	4.26		19.0			
28	01	4.6	10.77	32.21	9.40		46.1			

DATA BASE LISTING: CRUISE 79-04, STATION 1 TO STATION 47. PAGE 4
$ - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP $ (deg C)	SAL'TY$ (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
29	01	9.4	11.33	32.15	9.74		49.0			
30	01	9.3	12.76	32.03	1.09		9.0			
31	01	7.8	12.92	31.91	1.19		7.2			
32	01	8.8	12.98	31.90	.70		6.3			
33	01	6.0	13.07	31.86	1.55		8.0			
34	01	186.3	6.79	33.94		2.02		34.10	2.65	48.80
34	02	19.9	11.75	32.09	.90		3.7	10.30	1.18	18.20
35	01	123.8	6.49	33.87		1.18		37.80	3.11	63.00
35	02	15.6	12.25	32.05	1.51		7.4	6.80	.90	13.90
36	01	40.4	7.91	33.23		2.60		32.50	2.60	44.50
36	02	12.1	12.30	32.04	1.43		8.9	7.30	.94	14.90
37	01	36.6	7.73	33.28		2.71		30.30	2.51	40.00
37	02	9.9	12.46	32.07	1.78		8.8	6.80	.91	14.30
38	01	35.1	7.96	33.19		3.05		31.00	2.42	40.60
39	01	30.3	7.82	33.24		3.21		29.30	2.33	37.50
39	02	5.1	12.49	32.13	1.93		5.2	28.20	1.00	37.90
40	01	29.3	8.38	32.89		3.50		9.00	2.27	18.30
40	02	10.4	11.04	32.58	.89		3.7	17.90	1.57	33.00
41	01	36.0	7.82	33.19		3.01		30.60	2.44	40.30
41	02	8.6	11.91	32.46	1.38		5.2	15.40	1.41	30.60
42	01	47.9	7.36	33.58		2.42		32.70	2.55	44.40
42	02	6.3	12.26	32.19	1.89		5.8	10.30	1.04	19.60
43	01	106.9	6.60	33.90		1.59		35.90	2.89	56.20
43	02	9.2	11.90	32.35	2.78		8.6	13.30	1.26	26.10
44	01	32.9	8.55	33.05		3.38		30.70	2.31	42.30
44	02	6.4	12.45	32.24	2.70		8.9	8.70	1.00	18.50
45	01	116.8	6.86	33.79		2.05		34.20	2.84	50.30
45	02	7.5	12.64	32.23	2.07		6.6	5.80	.82	12.40
46	01	33.6	8.71	32.79		3.50		27.90	2.31	39.50
46	02	8.9	12.70	32.20	2.43		5.0	4.80	.77	12.20
47	01	54.9	8.01	33.35		3.50		26.20	2.20	34.00
47	02	7.3	12.41	32.23	1.62		3.9	5.80	.85	12.20

DATA BASE LISTING: CRUISE 79-05, STATION 1 TO STATION 69. PAGE 1
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	Si04 (uM/l)
1	01	246.5	6.34	33.84		2.11	2.2	35.40	2.65	55.60
1	02	194.3	6.76	33.79		2.15		34.50	2.63	52.00
1	03	141.7	7.60	33.69		2.98		29.10	2.22	38.30
1	04	119.8	7.63	33.51		3.89		27.00	1.88	33.10
1	05	96.4	7.77	33.15		4.66		21.20	1.73	24.60
1	06	68.7	7.94	32.67		5.73		13.80	1.32	17.70
1	07	45.3	9.22	32.34		6.26		9.10	1.04	15.20
1	08	32.5	13.08	32.14	.47	6.53	2.2	1.20	.58	7.80
1	09	12.2	17.44	32.12		5.79		.20	.42	6.10
2	01	176.2	6.51	33.78		.76		37.10	3.17	63.40
2	02	145.8	6.81	33.79		2.21		34.60	2.59	52.80
2	03	122.0	7.02	33.67		2.26		32.40	2.57	48.80
2	04	95.0	7.63	33.31		4.32		27.20	1.86	33.00
2	05	46.3	7.99	32.55		5.36				
2	06	35.6	9.53	32.35	.54	6.48		16.50	1.48	21.50
2	07	23.9	12.17	31.60			3.8	1.90	.64	8.60
2	08	5.2	17.08	31.99		5.83		.10	.40	6.30
3	01	20.8	9.81	32.63	5.24	6.07	15.3	14.40	1.61	24.60
4	02	69.5	7.80	33.27		2.67		31.20	2.64	48.00
4	03	51.7	8.03	33.12		2.50		29.70	2.57	46.70
4	04	30.1	8.95	32.77		3.95		23.30	2.06	34.10
4	05	17.8	9.58	32.34		4.30		23.70	2.06	36.40
4	06	7.5	12.00	32.00	.39	6.18	18.3	15.40	1.44	27.10
5	01	76.0	7.94	33.14		2.38		31.70	2.71	50.10
5	02	50.0				2.69		30.50	2.58	48.00
5	03	16.7	9.38	32.42		4.23		23.90	2.14	38.30
5	04	12.0	9.97	32.36	2.20	5.05	7.2	20.80	1.92	34.50
6	01	55.3	8.24	32.96		2.86		30.10	2.63	47.70
6	02	30.5	9.04	32.52		3.87		26.00	2.25	41.20
6	03	18.7	9.68	32.16		4.15		24.60	2.15	40.20
6	04	6.2	12.06	32.16	1.96	5.47	10.0	19.10	1.69	33.90
7	01	50.9	8.12	33.06		2.67		31.20	2.63	49.60
7	02	20.0				3.70		30.90	2.27	49.60
7	03	20.0				4.02		28.60	2.09	43.70
7	04	8.5	11.03	32.57	2.25	5.43	12.4	18.90	1.54	33.00
8	01	146.3	7.36	33.46		1.77	9.3	35.00	2.88	57.40
8	02	121.0	7.53	33.38		1.85	5.2	34.40	2.66	56.10
8	03	97.4	7.70	33.29		1.99		32.80	2.67	52.10
8	04	72.0	7.98	33.13		2.37		31.90	2.57	50.00
8	05	49.4	8.05	33.09		2.59		30.90	2.85	48.80
8	06	30.2	8.74	32.73		3.62		27.40	2.30	43.50
8	07	19.2	9.48	32.65		4.66		22.40	2.04	34.70
8	08	11.0	11.22	32.41	1.85	5.51	9.1	17.50	1.50	29.40
9	01	150.5	7.38	33.47		1.84		34.40	2.96	56.10
9	02	125.3	7.45	33.43		.85		38.80	2.83	63.30
9	03	100.0	7.68	33.30		1.86		35.40	2.88	56.60
9	04	73.3	7.81	33.23		2.12		35.00	2.73	53.10
9	05	48.3	8.02	33.13		2.80		30.40	2.52	46.30
9	06	27.8	8.92	32.83		3.95		23.70	2.19	35.60
9	07	15.4	9.76	32.50		4.49		22.20	2.00	35.80
9	08	11.5	10.28	32.22	1.53		.5	26.00	2.03	43.00
10	01	82.0	7.68	33.30		2.11		32.60	2.73	51.60
10	02	52.8	7.90	33.17		2.80		28.90	2.45	44.40
10	03	31.0	8.52	32.86		3.76		25.20	2.27	38.30
10	04	20.7	9.25	32.69		4.17		25.00	2.04	39.00
10	05	11.4	10.39	32.40	1.65	4.98	7.7	23.80	1.82	39.00

DATA BASE LISTING: CRUISE 79-03, STATION 1 TO STATION 69. PAGE 2
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
11	01	137.2	7.31	33.48		2.50		32.10	2.59	49.60
11	02	99.8	7.62	33.32		3.10		36.90	2.36	54.10
11	03	74.5	7.76	33.22		3.34		34.70	2.24	50.90
11	04	51.0	8.25	32.98		3.74		28.80	2.16	42.50
11	05	30.2	9.10	32.48		3.61		32.90	2.29	52.20
11	06	20.1	9.47	32.16		3.85		35.20	2.16	57.80
11	07	10.3	9.77	31.97	.63	4.23	2.8	24.50	2.22	41.50
12	01	45.9	9.00	32.49		3.77		26.10	2.29	40.60
12	02	30.0	9.29	32.29		3.89		25.30	2.24	41.20
12	03	21.0	10.01	31.98		4.70		23.30	2.07	38.30
12	04	9.9	11.05	31.74	2.96	5.50	11.0	20.70	1.89	36.40
13	01	46.7	8.46	32.98		3.46		27.60	2.31	41.90
13	02	27.3	9.05	32.43		3.69		26.70	2.31	42.90
13	03	17.2	9.72	32.04		4.24		23.20	2.19	37.60
13	04	9.2	10.67	31.80	1.68	4.86	7.7	14.40	2.02	23.00
14	01	99.9	6.91	33.72		2.31		33.00	2.57	49.50
14	02	72.4	7.12	33.62		2.74		31.20	2.44	44.40
14	03	46.6	7.65	33.32		3.34		32.00	2.24	45.10
14	04	28.3	9.17	32.70		4.33		22.70	2.00	34.90
14	05	16.0	10.31	32.72		5.46		15.80	1.57	26.40
14	06	9.6	12.43	32.47	3.47	6.55	17.9	10.70	1.10	21.50
15	01	106.0	6.43	33.91		1.59		36.50	2.88	58.50
15	02	72.9	6.83	33.83		1.85		35.80	2.79	55.30
15	03	47.6	7.76	33.40		2.49		31.30	2.61	45.90
15	04	27.9	8.56	33.08		3.52		26.40	2.28	39.80
15	05	17.2	9.21	33.56		4.78		21.80	1.87	35.10
15	06	7.3	13.40	32.44	4.02	6.79	22.3	10.40	1.09	29.60
16	01	145.0	6.40	33.84		1.48	13.1	37.60	2.79	64.30
16	02	120.3	6.31	33.94		1.43		37.30	2.96	60.40
16	03	99.3	6.39	33.93		1.41		37.50	2.93	59.60
16	04	72.8	6.59	33.86		1.55		36.70	2.85	56.60
16	05	46.2	7.19	33.63		2.06		32.70	2.53	47.50
16	06	28.6	8.23	33.51	.39	3.12		29.00	2.39	41.70
16	07	17.6	10.20	33.02	1.99	4.94	1.3	19.90	1.72	33.00
16	08	9.2	11.37	32.57	3.20	6.06	18.5	12.90	1.38	26.40
17	01	126.4	6.30	33.94		1.06		38.00	3.07	55.80
17	02	99.1	6.37	33.93		1.17		38.30	3.00	59.40
17	03	78.2	6.59	33.86		1.41		37.30	2.92	54.70
17	04	48.5	7.31	33.56		2.04		33.30	2.70	46.40
17	05	28.6	8.45	33.10		3.06		28.80	2.47	41.70
17	06	16.7	9.48	32.61		4.09		23.60	2.06	36.00
17	07	7.3	11.24	32.54	2.87	5.76	16.9	14.60	1.39	28.50
17	08	6.3	12.47	32.47	5.84	6.68	22.5	9.30	1.04	24.90
18	01	137.5	6.51	33.97		1.90		34.70	2.69	42.50
18	02	98.6	6.80	33.91		2.66		32.60	2.40	41.90
18	03	73.6	6.69	33.85		1.43		37.10	2.86	41.50
18	04	47.9	7.13	33.68		1.79		35.50	2.74	44.60
18	05	30.3	8.09	33.37		2.74		31.30	2.45	42.50
18	06	19.7	8.79	33.26		3.72		26.40	2.11	38.90
18	07	9.3	10.69	33.51	2.85	6.61	20.2	10.40	1.21	24.80
18	08	5.2	14.59	32.30	2.67	7.67	17.0	3.30	.66	19.60
19	01	132.8	6.66	33.95		2.19		35.10	2.58	51.60
19	02	118.8	6.74	33.92		2.38		34.90	2.48	49.50
19	03	97.0	6.91	33.91		3.00		31.70	2.08	43.40
19	04	73.1	7.15	33.80		3.88		28.80	2.00	38.80
19	05	48.5	7.31	33.55		2.15		33.50	2.63	48.30

DATA BASE LISTING: CRUISE 79-05, STATION 1 TO STATION 69. PAGE 3
$ - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP $ (deg C)	SAL'TY$ (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
19	06	28.5	8.14	33.28		2.85		31.00	2.44	44.10
19	07	19.1	8.92	33.02		3.67		27.10	2.18	39.20
19	08	9.7	11.73	32.54	1.89	5.98	14.7	14.10	1.34	26.40
19	09	4.9	12.92	32.30	2.00	7.13	15.2	7.70	.91	22.40
20	01	228.7	6.40	33.99		2.04		35.10	2.62	47.90
20	02	199.9	6.64	33.95		2.31		33.80	2.50	49.80
20	03	148.7	6.97	33.92		3.06		31.60	2.23	44.10
20	04	124.1	7.12	33.88		3.20		29.90	2.18	40.50
20	05	97.9	7.32	33.83		2.84		30.30	2.33	40.90
20	06	74.5	7.28	33.57		2.08		37.10	2.69	55.70
20	07	49.9	7.76	33.29		2.31		38.30	2.67	59.30
20	08	28.3	8.03	33.37		3.98		26.10	2.13	37.60
20	09	19.4	9.98	32.59	.98	4.78	5.9	19.70	1.76	30.00
20	10	11.0	10.95	32.27	1.71	5.39	9.1	17.40	1.58	28.10
21	01	252.9	6.16	33.97		1.85	0.0	36.00	2.71	57.90
21	02	200.8	6.34	33.99		2.13	0.0	34.70	2.59	54.10
21	03	149.8	6.86	33.96		2.74		30.60	2.35	43.30
21	04	124.9	7.26	33.79		2.96		30.70	2.30	41.20
21	05	98.8	7.49	33.57		4.21		24.70	1.87	30.20
21	06	74.2	7.43	33.30		3.81		25.60	2.09	33.60
21	07	48.9	7.70	32.91		4.90		18.60	1.63	23.90
21	08	30.0	8.30	32.81		4.90		18.10	1.54	24.90
21	09	20.9	9.46	33.39	1.27	5.49	6.0	11.50	1.18	18.60
21	10	10.9	12.72	32.22		6.65		4.10	.74	12.30
21a	11	300.0				1.79		35.70	2.75	58.80
21a	12	400.0				1.56		38.10	2.87	58.00
21a	13	475.0				1.15		40.00	3.02	67.10
22	01	198.2	6.53	33.97		2.46				
22	02	146.1	7.06	33.90		2.85				
22	03	95.9	7.51	33.46		4.49				
22	04	47.7	8.13	32.69		5.79				
22	05	17.3	12.49	33.13	.55	6.59				
22a	06	300.0				1.74				
22a	07	400.0				1.18				
22a	08	500.0				1.02				
22a	09	600.0				.41				
23	01	241.5	6.38	33.96		2.51		34.50	2.46	48.70
23	02	193.6	6.73	34.00		2.53		39.30	2.41	55.00
23	03	147.0	7.14	33.87		2.78		30.40	2.22	41.50
23	04	124.8	7.37	33.75		3.19		24.90	2.16	31.70
23	05	96.4	7.51	33.50		3.68		24.20	1.96	30.10
23	06	72.7	7.78	33.15		5.17		17.50	1.55	20.10
23	07	47.7	7.90	32.79		6.03		11.50	1.20	15.20
23	08	29.2	9.73	32.89	.89	6.40	2.6	6.40	.91	13.80
23	09	16.1	14.81	32.57		6.47		.30	.52	6.80
23	10	6.4	17.27	32.12		5.94		.10	.45	6.40
23a	11	300.0				1.97		36.80	2.72	56.10
23a	12	400.0				1.25		38.50	2.99	63.50
23a	13	500.0				.75		38.40	2.93	62.20
23a	14	600.0				1.78		35.80	2.67	56.50
24	01	37.9	8.94	32.60		3.14	8.3	29.50	2.55	49.50
24	02	28.3	9.12	32.53		3.13		27.20	2.43	41.90
24	03	21.7	9.31	32.46		3.39		27.40	2.40	41.90
24	04	10.3	10.81	32.31	2.95	4.61	8.0	22.10	1.81	35.60
24	05	3.0	14.66	31.88	6.81	8.33	20.0	1.00	.38	11.90
25	01	48.6	8.63	32.78		2.78	20.5	29.80	2.57	49.10

DATA BASE LISTING: CRUISE 79-05, STATION 1 TO STATION 69. PAGE 4
* - Indicates that data is from an electronic sensor.

STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
25	02	30.0	8.89	32.74		3.79		25.90	2.27	40.50
25	03	19.2	9.52	32.44		4.57		22.00	2.01	35.30
25	04	15.7	10.37	32.42	7.27	5.54	26.0	17.40	1.59	28.30
25	05	1.5	14.75	31.78	9.31	8.21	.7	.40	.24	6.30
27	01	60.5	8.48	32.87		3.10		30.90	2.50	48.70
27	02	52.3	8.52	32.84		3.12		29.60	2.48	45.30
27	03	28.9	9.09	32.59		4.00		25.60	2.24	40.10
27	04	20.8	9.74	32.48		4.90		22.10	1.87	35.00
27	05	6.0	14.02	32.01		8.26	66.0	.50	.33	10.10
27	06	1.8	14.06	32.00	11.96	8.33	61.4	.20	.31	9.40
29	01	84.5	7.79	33.23		2.02		34.00	2.87	46.60
29	02	76.4	8.03	33.07		2.30		32.20	2.70	46.00
29	03	46.6	8.54	32.78		2.99		29.50	2.51	45.70
29	04	27.5	9.56	32.28		4.50		27.50	2.04	42.80
29	05	18.7	11.01	32.16		6.12		14.00	1.40	26.20
29	06	10.6	13.47	32.16	11.42	7.94	41.8	1.00	.42	11.10
29	07	1.9	15.02	31.78	6.15	8.67	33.4	.10	.22	6.90
31	01	112.3	7.07	33.67		1.64	34.4	33.80	2.82	45.90
31	02	98.1	7.28	33.48		2.89		29.10	2.38	40.90
31	03	72.5	7.80	33.22		2.59		31.00	2.53	44.00
31	04	48.2	8.55	32.81		3.59		24.60	1.96	32.90
31	05	27.2	10.05	32.91		5.62		11.90	1.23	20.60
31	06	17.0	12.49	33.37		6.29		3.20	.61	9.40
31	07	6.5	16.36	31.59	1.31	6.80	5.2	.10	.27	3.10
33	01	141.9	6.65	33.87		1.15		38.40	3.03	52.40
33	02	120.7	6.96	33.76		2.17		32.30	2.60	46.20
33	03	97.3	7.43	33.44		3.86		25.80	1.95	32.30
33	04	73.0	7.72	33.06		4.74		19.40	1.69	22.90
33	05	48.2	8.11	32.75		5.32		16.60	1.41	19.90
33	06	28.4	10.13	32.21	.96	6.33	3.5	6.20	.88	12.00
33	07	17.0	13.73	33.01		6.44		.70	.50	8.20
33	08	5.9	17.01	32.08		5.84		.30	.43	6.90
35	01	160.6	6.54	33.91		1.41		36.50	2.97	53.30
35	02	148.7	6.57	33.87		1.07		37.80	3.08	48.10
35	03	126.2	6.97	33.75		2.98		30.70	2.35	42.40
35	04	102.0	7.51	33.46		4.13		27.40	1.92	33.00
35	05	74.7	7.79	32.97		5.01		17.40	1.56	20.40
35	06	49.7	8.16	32.65	.43	6.67	1.1	8.60	1.08	12.40
35	07	29.8	9.56	32.48		6.35		7.20	.98	13.90
35	08	17.0	12.67	32.36	.75	6.61	4.2	2.20	.63	9.00
35	09	9.9	14.33	32.30		6.58		.40	.49	7.40
36	01	190.5	6.47	33.94		1.35		37.00	2.97	43.10
36	02	147.9	6.60	33.93		1.69		38.00	2.83	49.20
36	03	125.1	7.28	33.68		3.87		26.80	2.03	34.00
36	04	100.0	7.53	33.42		4.29		25.80	1.90	31.10
36	05	72.1	7.82	32.92		5.58		14.80	1.41	18.10
36	06	46.9	8.90	32.62		6.58		6.50	.94	11.30
36	07	31.3	11.27	32.45	.47	6.90	2.9	3.20	.74	10.90
36	08	17.7	15.48	32.05		6.22		.10	.46	6.50
36	09	4.7	17.45	32.12		5.65		0.00	.41	6.10
37	01	224.7	6.35	33.98		2.10		34.90	2.64	41.80
37	02	192.0	6.54	33.95		2.64		32.80	2.46	41.60
37	03	143.9	7.16	33.72		3.79		27.20	2.06	36.00
37	04	121.6	7.41	33.61		4.06		25.20	1.97	31.10
37	05	95.1	7.69	33.19		4.71		20.70	1.69	24.00
37	06	72.4	7.77	32.92		5.31		16.30	1.49	19.80

DATA BASE LISTING: CRUISE 79-05, STATION 1 TO STATION 69. PAGE 5
* - Indicates that data is from an electronic sensor.

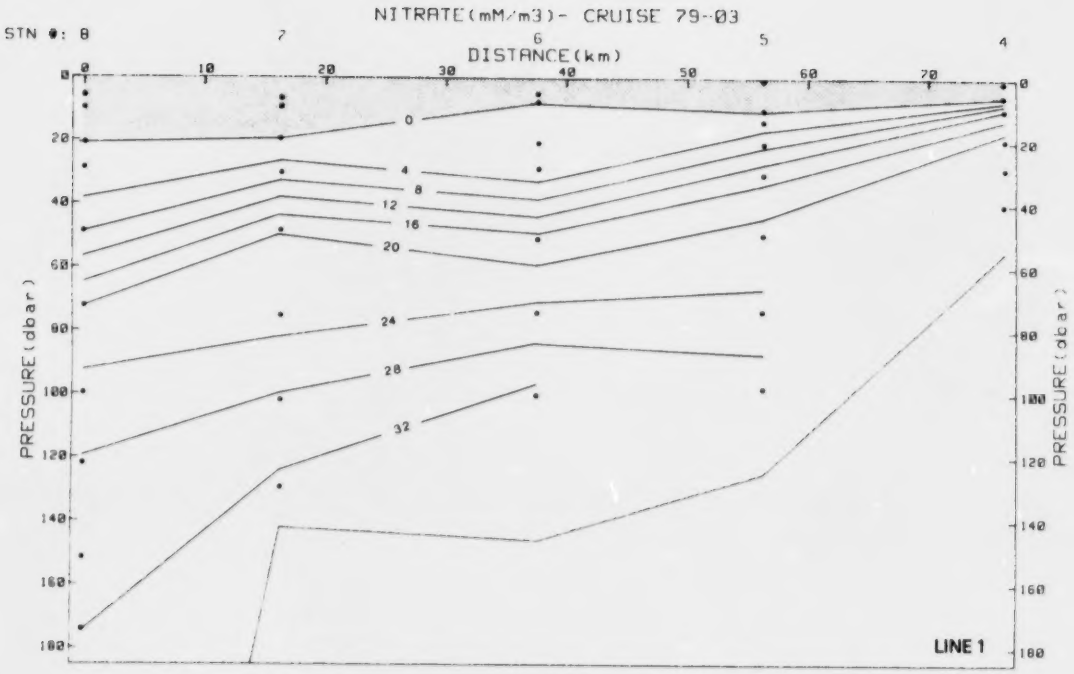
STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
37	07	48.9	8.89	32.66		6.53		7.60	.97	13.30
37	08	35.5	13.27	32.49	.34	6.75	2.0	.20	.54	6.50
37	09	25.7	16.30	32.47		6.00		0.00	.48	5.70
37	10	12.7	17.50	32.23		4.20		0.00	.44	5.50
38	01	253.5	6.20	33.98		2.91		33.60	2.45	53.00
38	02	197.8	6.73	33.94		2.71		31.00	2.41	46.10
38	03	148.0	7.23	33.80		3.66		27.30	2.01	36.00
38	04	120.2	7.53	33.60		4.27		24.50	1.92	30.20
38	06	72.8	7.92	32.86		4.94		18.30	1.60	24.70
38	07	46.6	8.63	32.70		6.57		7.00	.96	11.70
38	08	31.7	10.29	32.48	.73	6.77	2.4	4.40	.86	11.10
38	09	14.2	14.67	33.06		6.33		.40	.52	7.30
38	10	2.6	16.99	32.11		5.83		0.00	.47	7.70
39	01	138.4	6.88	33.83		2.91		30.40	2.37	33.70
39	02	117.8	7.36	33.58		4.27		24.50	1.90	30.60
39	03	99.3	7.52	33.42		4.46		23.10	1.82	27.60
39	04	75.1	7.85	32.88		5.43		15.80	1.34	19.70
39	05	49.3	8.39	32.56		5.99		11.50	1.19	16.70
39	06	33.9	9.98	32.44	.54	6.19	3.9	8.50	1.06	13.80
39	07	23.8	11.27	32.54		6.42		3.90	.78	10.90
39	08	9.1	16.56	32.16		6.00		0.00	.44	8.00
41	01	120.0	6.73	33.84		1.22		35.50	2.89	48.10
41	02	98.3	7.05	33.67		1.63		33.80	2.84	37.30
41	03	74.5	7.42	33.39		2.85		29.40	2.40	40.40
41	04	49.1	8.01	32.87		4.27		21.60	1.91	30.60
41	05	28.9	8.57	32.68		5.18		15.20	1.51	22.00
41	06	24.4	10.84	32.31	1.06	6.41	6.9	6.40	.94	13.80
41	07	9.5	15.93	32.42		6.04		0.00	.45	6.90
43	01	105.9	6.68	33.87		.69		35.50	3.22	51.70
43	02	75.9	7.31	33.48		2.47		30.70	2.56	45.60
43	03	51.0	7.54	33.18		3.51		26.20	2.17	35.20
43	04	30.2	8.34	32.97		3.81		22.20	1.93	28.50
43	05	15.7	13.51	32.54	1.58	6.25	10.8	3.10	.66	10.00
43	06	4.7	16.14	32.06	.96	6.39	7.1	.30	.40	8.20
45	01	63.4	7.85	33.10		2.87		28.60	2.43	34.90
45	02	50.0				3.47		24.70	2.15	32.00
45	03	30.0				3.54		25.90	2.12	36.20
45	04	19.0			1.73	5.08	6.0	12.60	1.30	19.50
45	05	10.0			.89	6.42	5.9	.50	.43	8.00
46	01	45.6	8.58	32.76		2.82		29.00	2.36	49.20
46	02	32.3	11.40	32.22		5.49	6.2	13.20	1.44	22.00
46	03	20.3	16.33	32.11	1.04	6.20		.30	.41	6.90
46	04	7.1	16.53	32.04		6.18		0.00	.39	6.90
47	01	55.4	8.13	32.99		2.61		30.00	2.58	47.50
47	02	31.3	9.77	32.39		3.32		23.80	2.33	43.70
47	03	17.6	13.01	31.92	4.93	5.69	23.4	7.80	1.12	19.30
47	04	10.8	14.24	31.82		7.09		.80	.57	6.50
47	05	5.4	15.33	31.80	4.54	7.09	20.3	.20	.46	5.20
49	01	110.6	6.88	33.79		1.06		33.60	3.03	64.30
49	02	102.5	6.98	33.74		1.29		37.50	3.02	69.90
49	03	77.2	7.36	33.38		3.52		26.50	2.16	35.60
49	04	50.7	7.86	33.08		3.67		24.50	2.17	35.40
49	05	19.7	9.00	32.52		4.63		19.20	1.72	26.60
49	06	9.9	14.13	32.14	2.23	6.58	11.6	2.60	.58	9.40
51	01	130.4	6.48	33.95		1.56		36.20	2.75	50.20
51	02	99.8	6.99	33.73		3.44		28.70	2.19	38.90

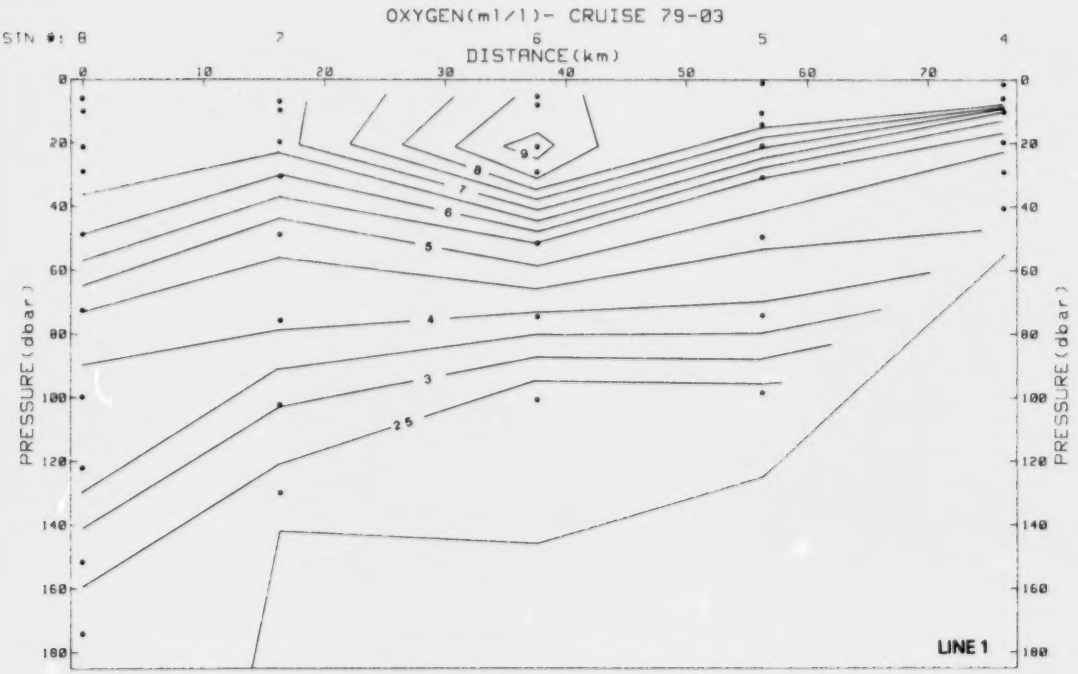
DATA BASE LISTING: CRUISE 79-05, STATION 1 TO STATION 69. PAGE 6
* - Indicates that data is from an electronic sensor.

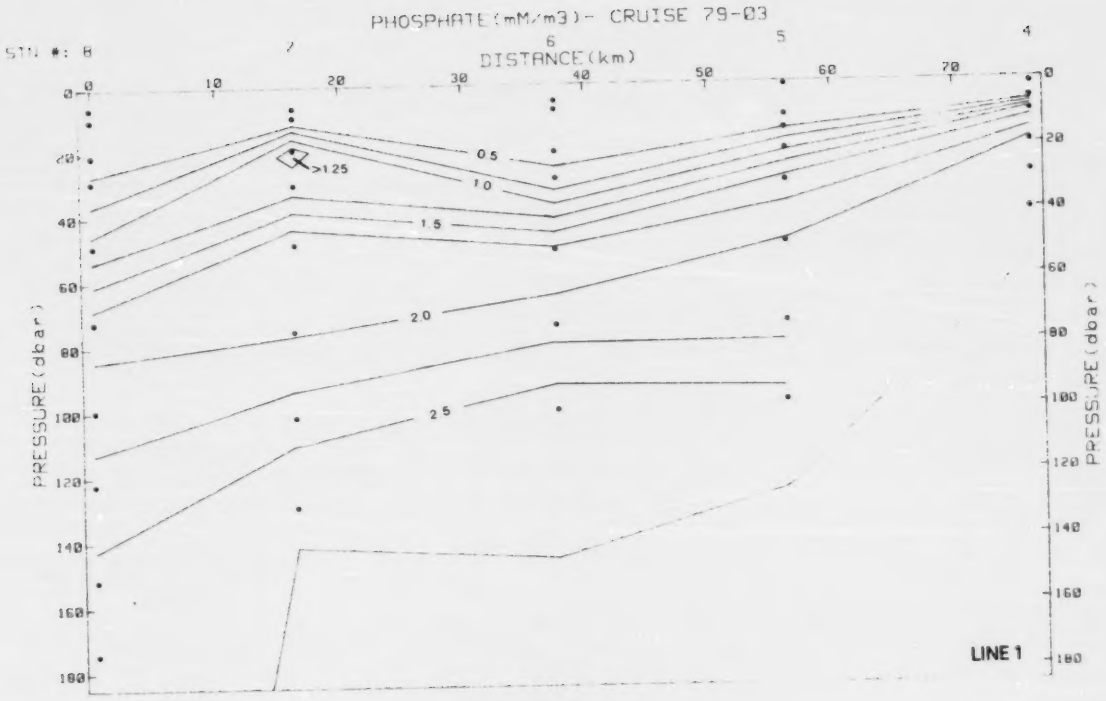
STN NO.	BOT NO.	DEPTH (dbar)	TEMP * (deg C)	SAL'TY* (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
51	03	76.2	7.26	33.42		4.15		25.50	1.93	33.10
51	04	48.7	7.65	32.98		4.96		20.50	1.72	25.30
51	05	29.9	8.40	32.59		4.80		17.60	1.65	24.90
51	06	19.4	8.96	32.39		5.76		11.10	1.17	17.60
51	07	9.7	14.87	32.30	1.82	6.41	9.8	3.40	.65	11.30
53	01	173.1	6.59	33.93		1.96		34.90	2.69	53.40
53	02	147.8	6.94	33.96		3.54		28.70	2.10	40.00
53	03	124.4	7.29	33.82		3.54		27.90	2.04	36.20
53	04	96.5	7.45	33.50		4.47		23.20	1.77	28.10
53	05	72.4	7.73	33.13		4.80		20.40	1.67	23.50
53	06	45.6	8.05	32.64		5.89		12.60	1.31	17.60
53	07	27.9	9.01	32.54		6.29		8.50	1.06	14.70
53	08	17.5	11.23	32.58		6.45		4.40	.81	10.90
53	09	9.7	16.62	32.02	.88	6.30	4.5	.80	.45	8.80
54	01	252.8	6.31	33.98		2.40		34.70	2.56	45.90
54	02	204.1	6.67	33.97		2.78		31.90	2.47	44.90
54	03	151.9	7.16	33.89		3.36		29.20	2.21	38.40
54	04	128.1	7.26	33.78		4.02		24.80	1.98	31.70
54	05	103.1	7.52	33.58		4.15		23.10	1.96	27.00
54	06	74.3	7.53	32.87		5.60		16.40	1.50	20.80
54	07	50.5	8.07	32.65		5.80		12.70	1.31	15.50
54	08	29.9	9.35	32.66		5.88		10.40	1.19	17.40
54	09	18.7	12.84	32.21	1.10	6.77	3.6	2.30	.68	10.10
54	10	12.4	15.00	32.39		6.54		.90	.55	9.00
55	01	40.9	8.88	32.67		3.13		28.30	2.41	50.30
55	02	28.8	9.26	32.50		3.81		24.90	2.29	42.50
55	03	15.3	9.98	32.50		5.07		17.90	1.80	30.80
55	04	8.7	14.20	31.72	6.09	7.19	21.4	2.90	.74	13.80
57	01	50.2	8.66	32.78		2.99		28.60	2.46	48.80
57	02	24.3	9.25	32.43		4.07		23.20	2.24	37.30
57	03	11.8	11.24	32.24		5.67		14.60	1.48	27.40
57	04	10.5	11.86	32.17	3.98	6.31	14.2	9.30	1.22	22.60
57	05	3.0	14.24	31.78		7.50	28.2	2.00	.58	11.90
59	01	49.9	8.97	32.57		3.63		26.40	2.27	41.50
59	02	39.2	9.09	32.46		3.71		26.20	1.94	41.50
59	03	30.0	12.92	31.52		4.50		22.50	2.11	36.90
59	04	12.9	13.40	31.68		7.36		9.00	1.17	32.90
59	05	6.9	13.50	31.69	9.21	7.63	34.4	8.60	1.11	33.30
59	06	4.1			8.19	7.66	25.7	9.00	1.17	35.80
61	01	81.7	7.83	33.23		2.24		35.10	2.66	53.40
61	02	48.9	8.69	32.83		3.40		27.20	2.34	41.70
61	03	29.9	9.38	32.53		4.15		25.70	2.09	41.00
61	04	19.5	10.25	32.43		4.85		17.70	1.80	29.70
61	05	13.0	12.63	32.20	4.48	6.90	23.3	8.00	1.04	19.70
61	06	3.0	13.53	31.93	6.37	7.43	24.8	8.30	1.02	28.50
63	01	108.1	7.16	33.62		3.47		27.90	2.13	36.90
63	02	75.7	7.71	33.17		3.38		30.20	2.21	41.50
63	03	50.4	8.12	32.72		6.02		11.50	1.21	14.90
63	04	29.0	9.75	32.48						
63	05	17.1	11.38	32.46		6.46		3.80	.79	9.80
63	06	16.6	12.17	32.30	.67	6.51	3.8	2.40	.68	9.00
63	07	5.3	16.74	32.11		5.92		0.00	.42	6.70
65	01	142.9	6.65	33.90		1.32		36.70	2.97	66.00
65	02	125.5	6.79	33.87		1.86		33.70	2.68	56.10
65	03	99.7	7.28	33.51		3.80		26.90	2.06	34.60
65	04	75.4	7.57	33.09		4.89		17.50	1.66	21.40

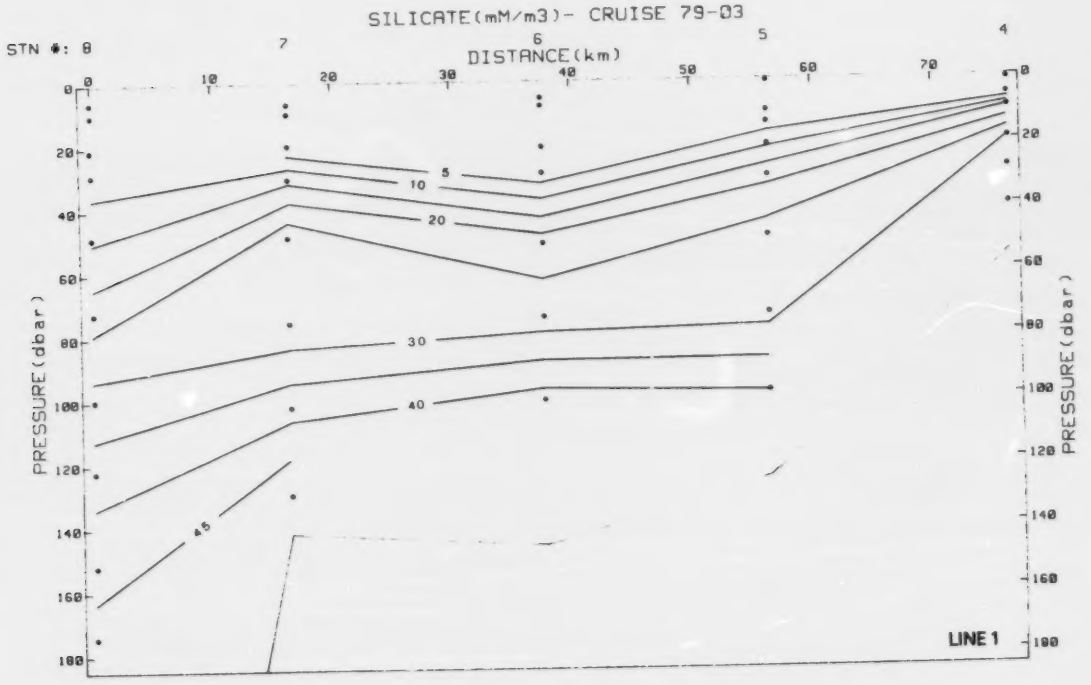
DATA BASE LISTING: CRUISE 79-05, STATION 1 TO STATION 69. PAGE 7
$ - Indicates that data is from an electronic sensor.

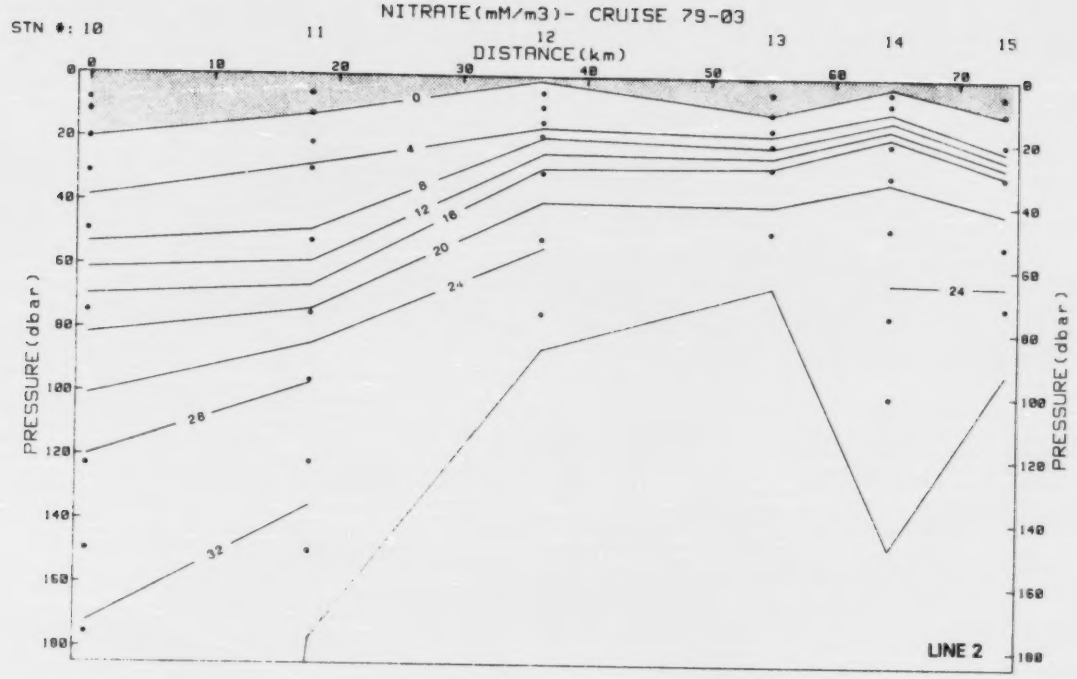
STN NO.	BOT NO.	DEPTH (dbar)	TEMP $ (deg C)	SAL'TY$ (ppt)	CHL A (mg/m3)	OXY (ml/l)	14C PRD mg/m3/h	NO3 (uM/l)	PO4 (uM/l)	SiO4 (uM/l)
65	05	48.8	8.13	32.75		6.19		10.30	1.17	13.60
65	06	32.4	8.94	32.89		6.17		8.00	1.11	13.00
65	07	25.2	10.94	32.39	.72	6.33	3.8	6.30	.94	12.10
65	08	7.6	16.44	32.24		5.70		.20	.47	7.30
67	01	159.0	6.64	33.94		1.89		37.40	2.76	63.50
67	02	148.3	6.71	33.90		2.09		32.70	2.66	53.40
67	03	125.9	6.88	33.84		3.01		30.60	2.34	44.00
67	04	99.6	7.37	33.59		4.20		23.20	1.93	28.10
67	05	75.3	7.61	33.13		4.80		18.90	1.72	22.80
67	06	49.4	8.43	32.66		6.44		8.20	1.06	12.40
67	07	25.5	10.46	32.49	.57	6.92	3.2	3.10	.77	9.80
67	08	18.6	13.15	32.43		6.89		.50	.58	7.50
67	09	4.1	16.79	32.15		5.96		0.00	.46	7.10
68	01	199.9	6.34	33.96		1.55		35.90	2.89	37.90
68	02	148.7	6.76	33.94		2.24		32.00	2.60	46.70
68	03	123.3	7.08	33.74		3.43		28.40	2.18	38.70
68	04	100.3	7.59	33.32		4.48		22.30	1.70	25.90
68	05	76.1	7.71	33.07		4.89		19.20	1.60	22.40
68	06	50.5	8.28	32.55		6.08		10.90	1.20	15.50
68	07	34.9	10.78	32.89		6.94		1.80	.69	8.80
68	08	26.2	12.50	32.37	.39	6.79	.0	.80	.62	8.20
68	09	8.1	17.02	32.14		5.81		0.00	.47	7.50
69	01	52.3	8.17	32.96		3.31		28.30	2.26	42.50
69	02	29.3	9.46	32.79		4.12		23.30	1.77	35.30
69	03	20.9	9.83	32.64		4.28		23.50	1.96	36.40
69	04	10.5	11.92	32.64	1.77	5.49	9.4	16.50	1.51	30.30
69	05	5.1	12.37	32.18		5.72		16.20	1.46	30.30

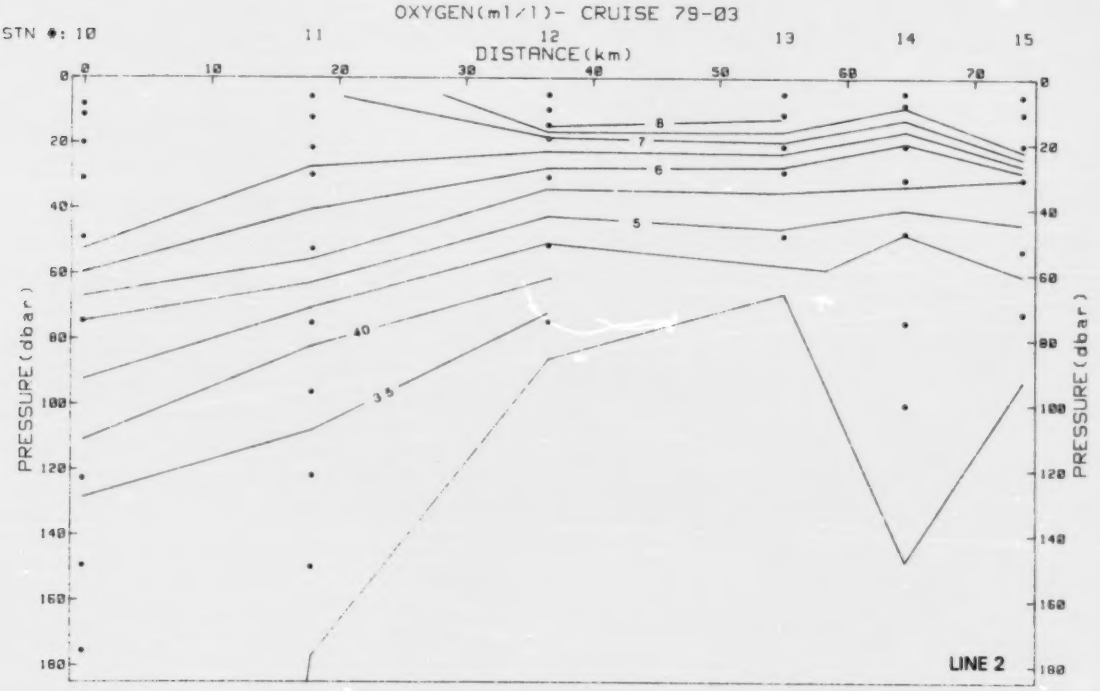

NITRATE(mM/m3)- CRUISE 79-03
STN #: 8
7
6
5
4
DISTANCE(km)
0
10
20
30
40
50
60
70
PRESSURE(dbar)
0
4
8
12
16
20
24
28
32
LINE 1

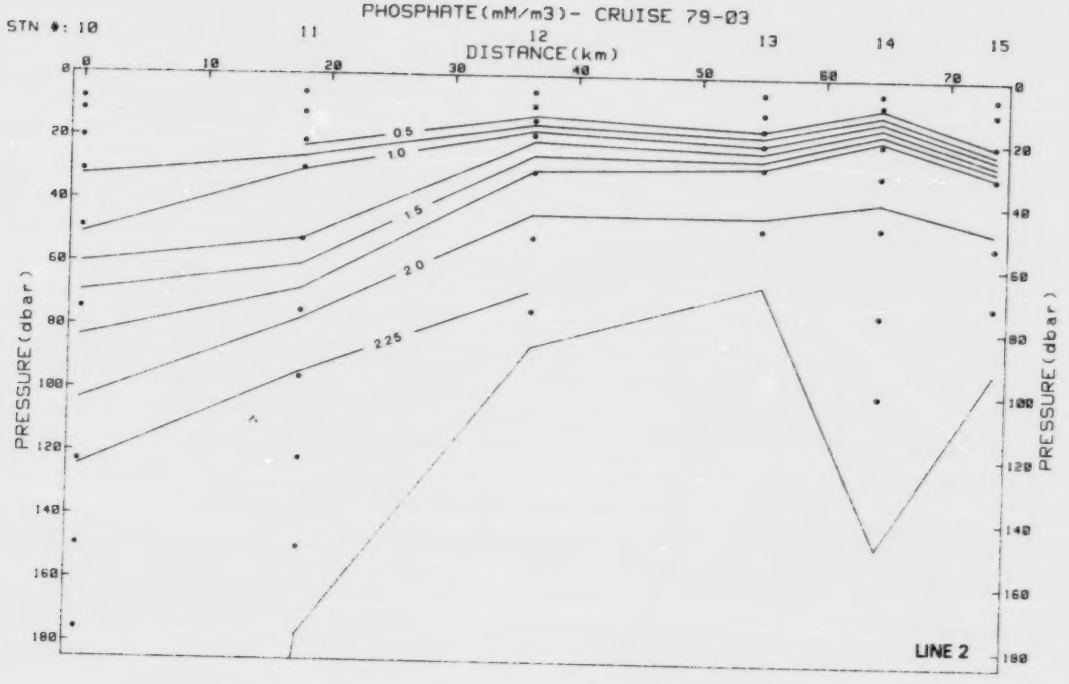

OXYGEN(ml/l)- CRUISE 79-03
STN #: 8
7
6
5
4
DISTANCE(km)
0
10
20
30
40
50
60
70
PRESSURE(dbar)
9
8
7
6
5
4
3
2.5
LINE 1

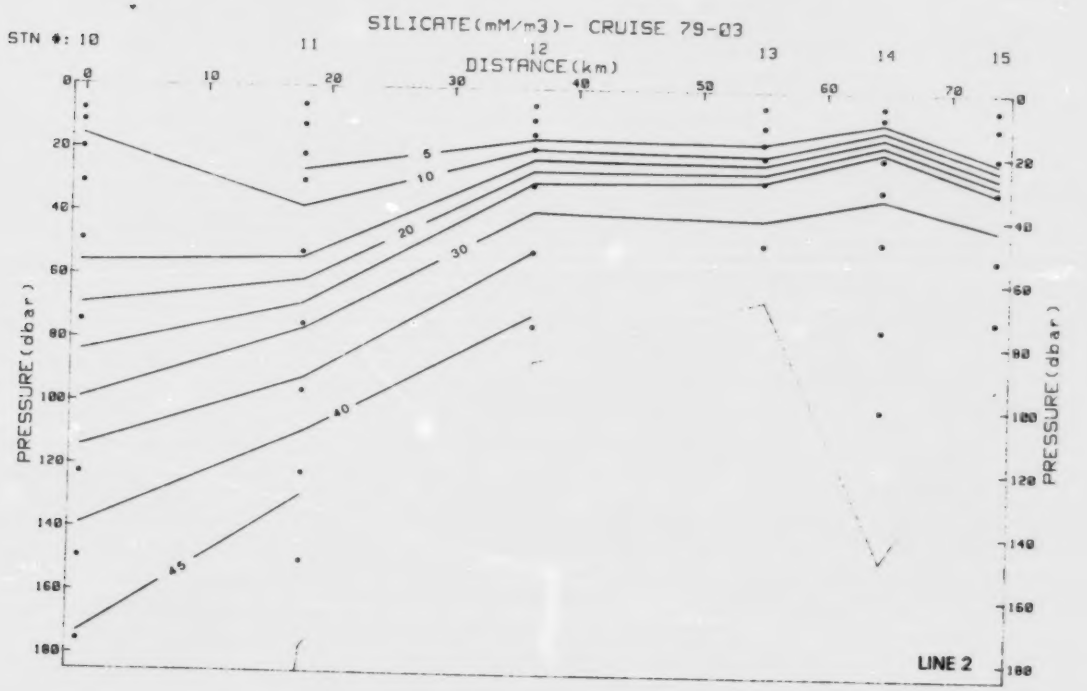

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #: 8
DISTANCE(km)
PRESSURE(dbar)
0.5
1.0
1.5
2.0
2.5
>1.25
LINE 1

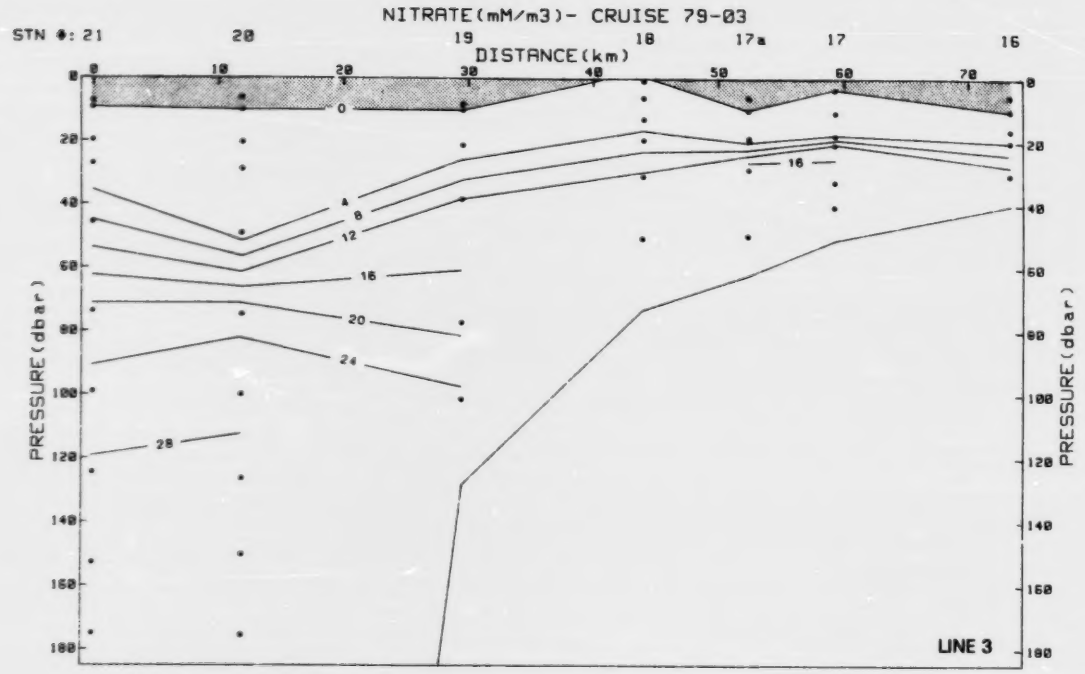

SILICATE(mM/m3)- CRUISE 79-03
STN #: 8
DISTANCE(km)
PRESSURE(dbar)
5
10
20
30
40
45
LINE 1

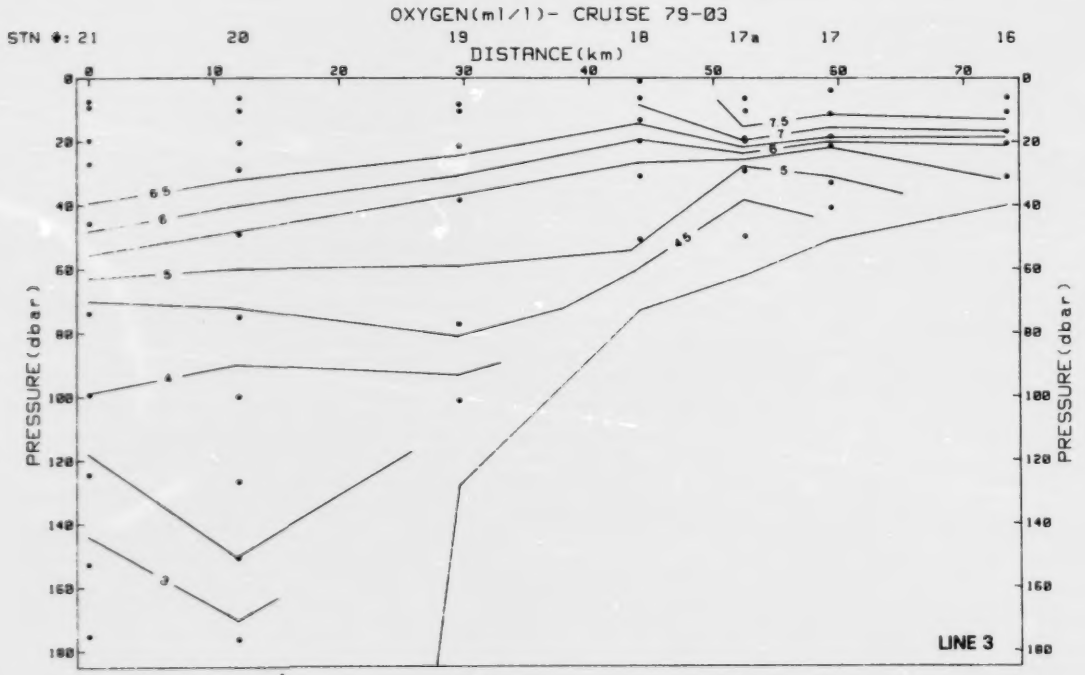

NITRATE(mM/m3)- CRUISE 79-03
STN #: 10
11
12
13
14
15
DISTANCE(km)
0
10
20
30
40
50
60
70
PRESSURE(dbar)
0
4
8
12
16
20
24
28
32
LINE 2

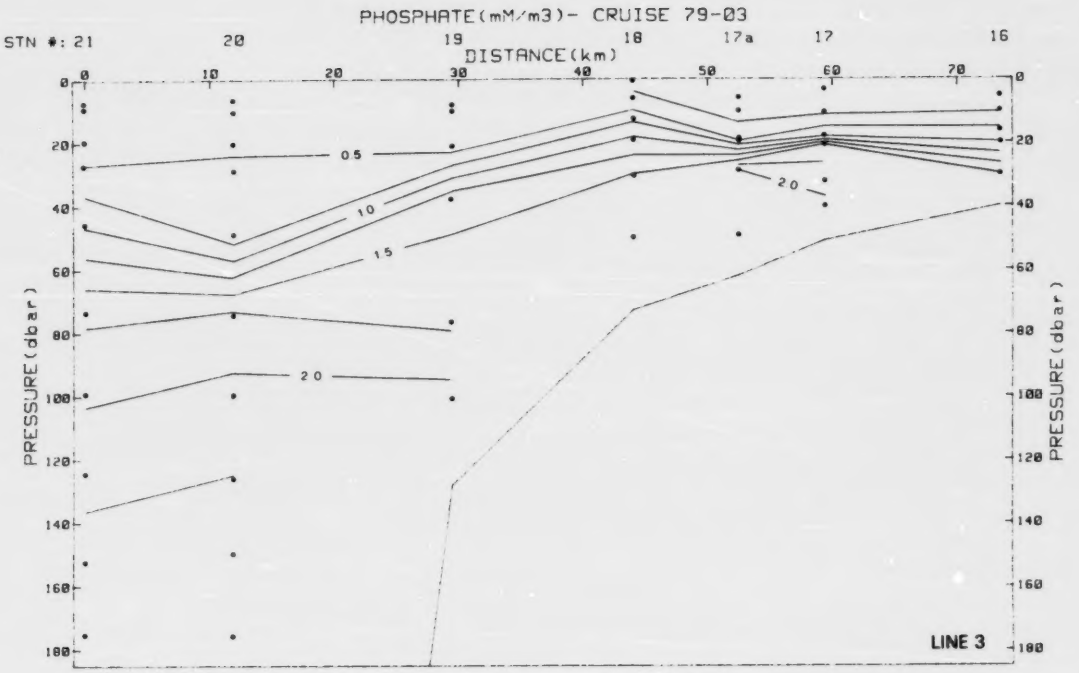

OXYGEN(ml/l)- CRUISE 79-03
STN #: 10
11
12
13
14
15
DISTANCE(km)
0
10
20
30
40
50
60
70
PRESSURE(dbar)
8
7
6
5
40
35
LINE 2

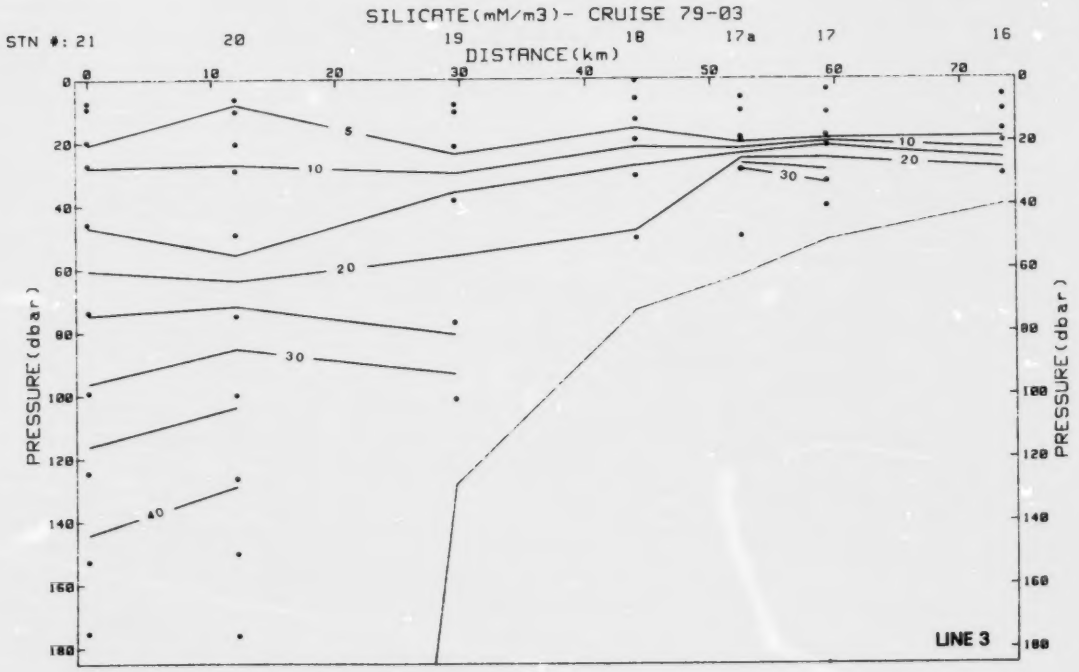

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #: 10
DISTANCE(km)
PRESSURE(dbar)
0.5
1.0
1.5
2.0
2.25
LINE 2

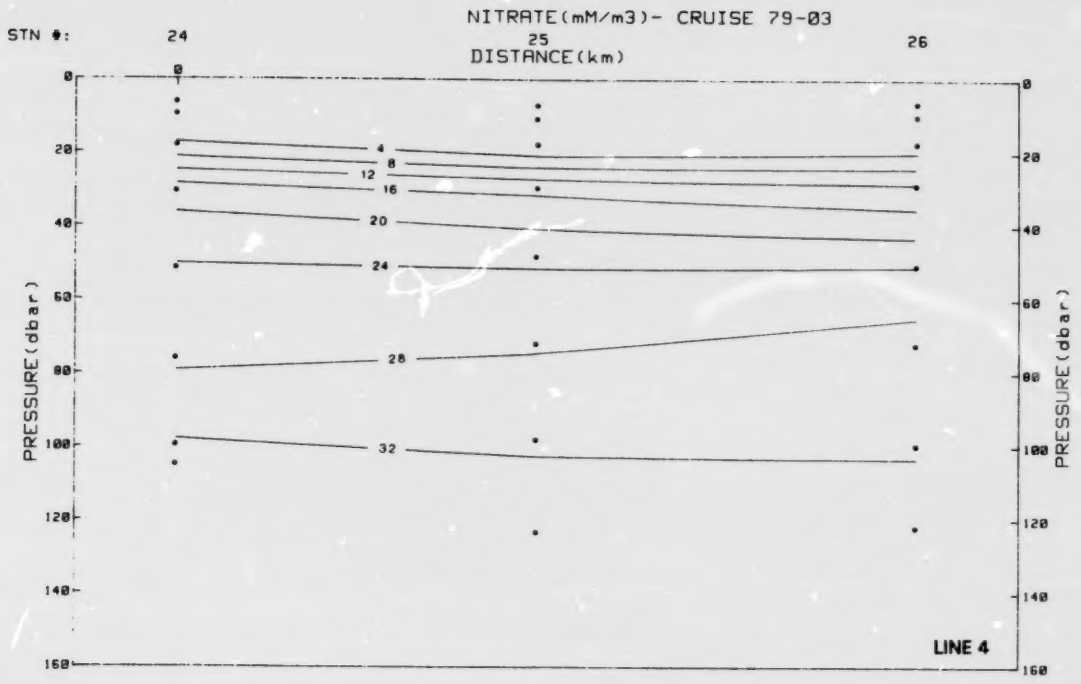

SILICATE(mM/m3)- CRUISE 79-03
STN #: 10
DISTANCE(km)
PRESSURE(dbar)
5
10
20
30
40
45
LINE 2

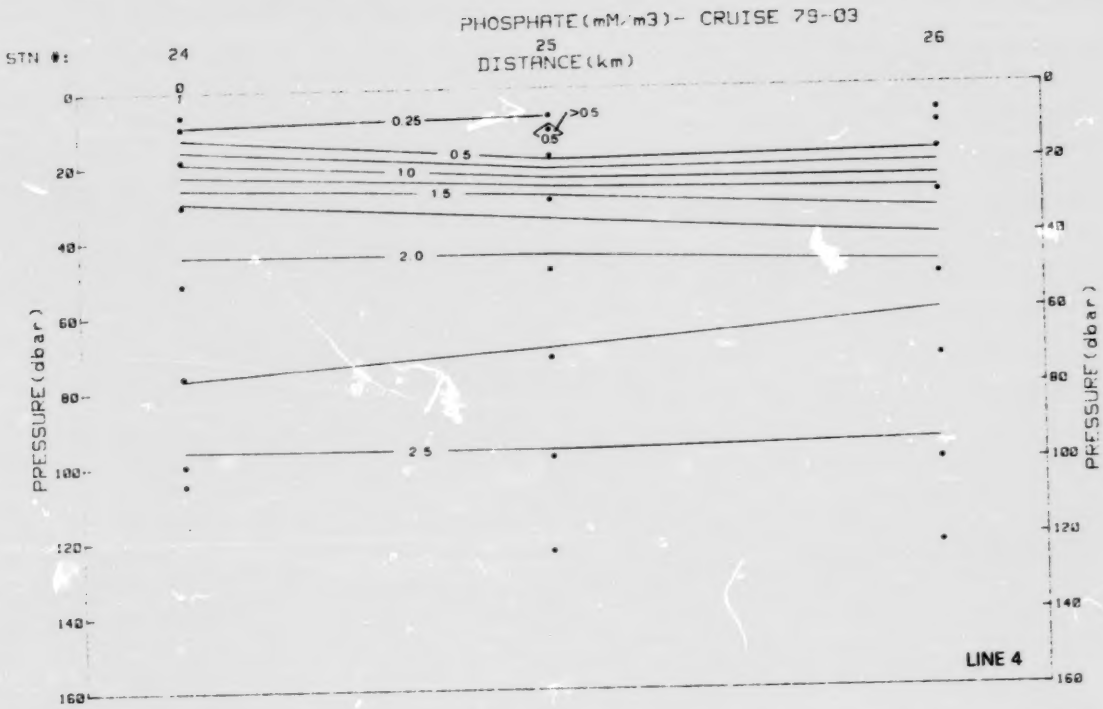

NITRATE(mM/m3)- CRUISE 79-03
STN #: 21
20
19
18
17a
17
16
DISTANCE(km)
0
10
20
30
40
50
60
70
0
4
8
12
16
20
24
28
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
180
LINE 3

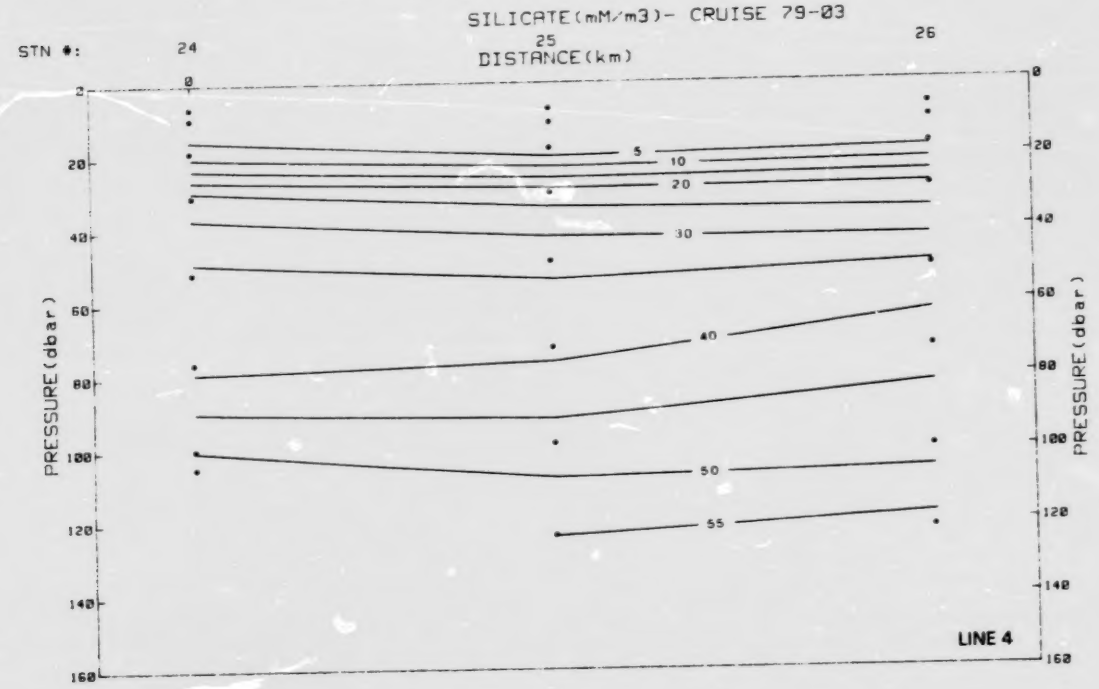

OXYGEN(ml/l)- CRUISE 79-03
STN #: 21
20
19
18
17a
17
16
DISTANCE(km)
0
10
20
30
40
50
60
70
7.5
7
6.5
6
5.5
5
4.5
4
3
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
180
LINE 3

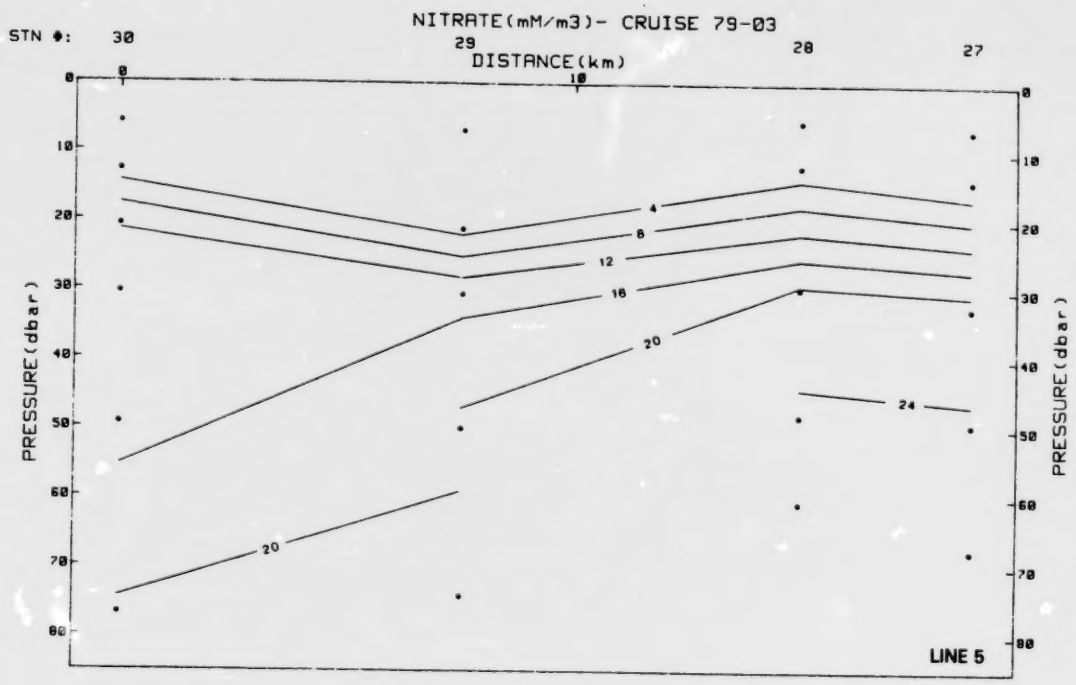

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #: 21
20
19
18
17a
17
16
DISTANCE(km)
0
10
20
30
40
50
60
70
PRESSURE(dbar)
0.5
1.0
1.5
2.0
2.0
LINE 3

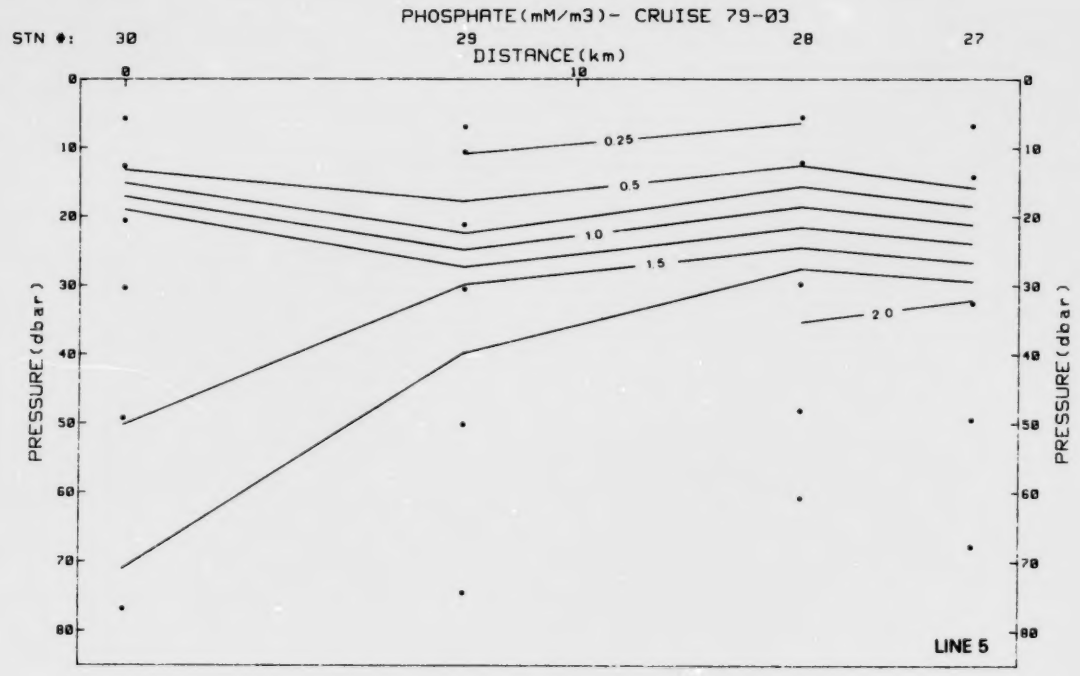

SILICATE(mM/m3)- CRUISE 79-03
STN #: 21
20
19
18
17a
17
16
DISTANCE(km)
0
10
20
30
40
50
60
70
PRESSURE(dbar)
5
10
20
30
40
10
20
30
LINE 3

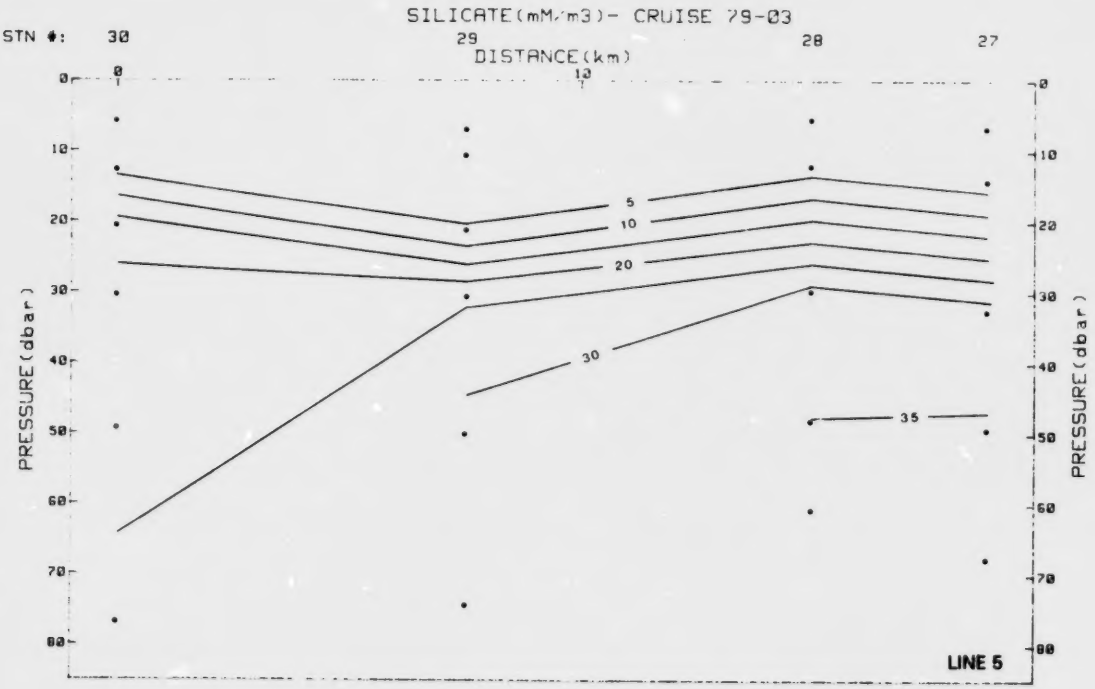

NITRATE(mM/m3)- CRUISE 79-03
STN #:
24
25
26
DISTANCE(km)
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
4
8
12
16
20
24
28
32
LINE 4

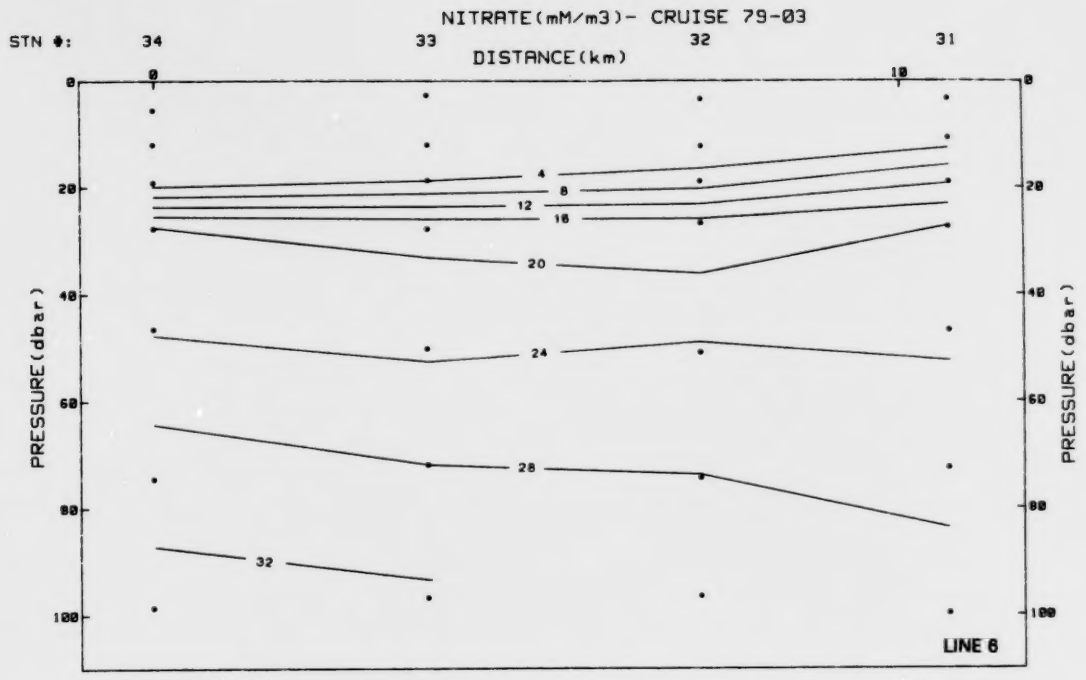

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #:
24
25
26
DISTANCE(km)
0
20
40
60
80
100
120
140
160
PRESSURE(dbar)
0.25
>05
05
0.5
1.0
1.5
2.0
2.5
LINE 4

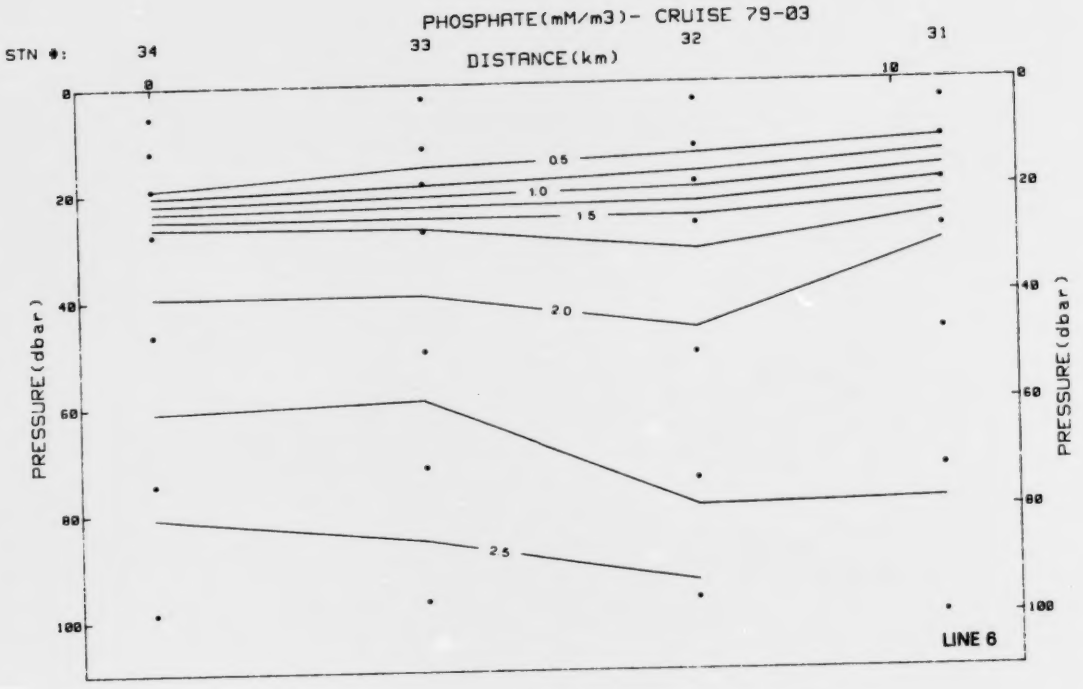

SILICATE(mM/m3)- CRUISE 79-03
STN #:
24
25
26
DISTANCE(km)
0
20
40
60
80
100
120
140
160
PRESSURE(dbar)
5
10
20
30
40
50
55
LINE 4

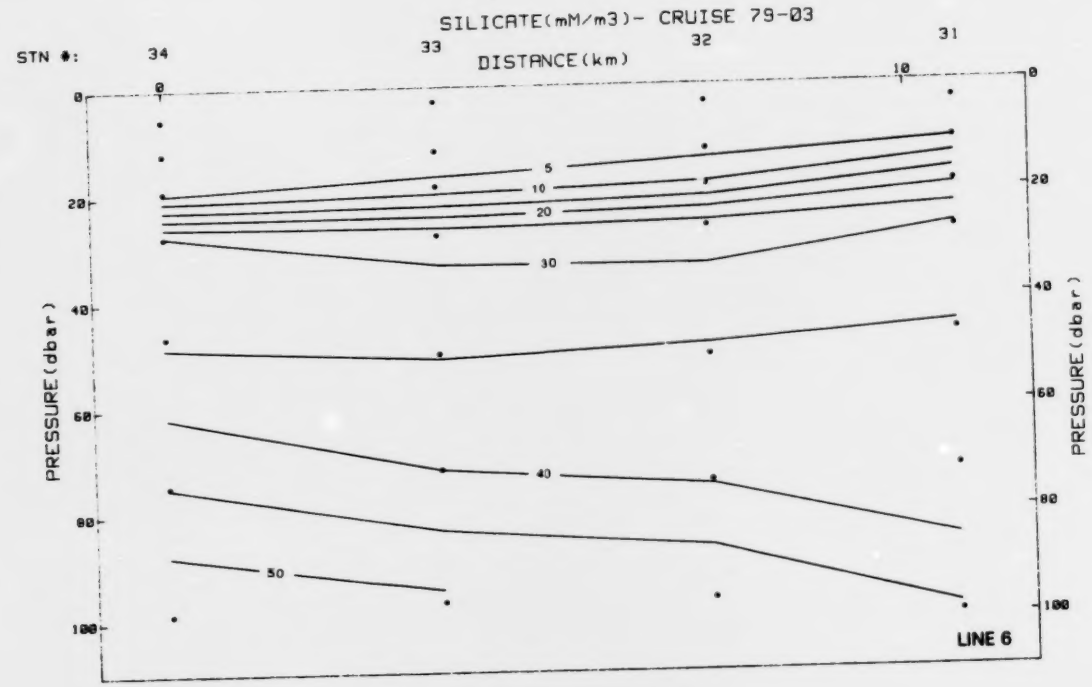

NITRATE(mM/m3)- CRUISE 79-03
STN #: 30
29
28
27
DISTANCE(km)
0
10
PRESSURE(dbar)
0
10
20
30
40
50
60
70
80
4
8
12
16
20
24
20
LINE 5

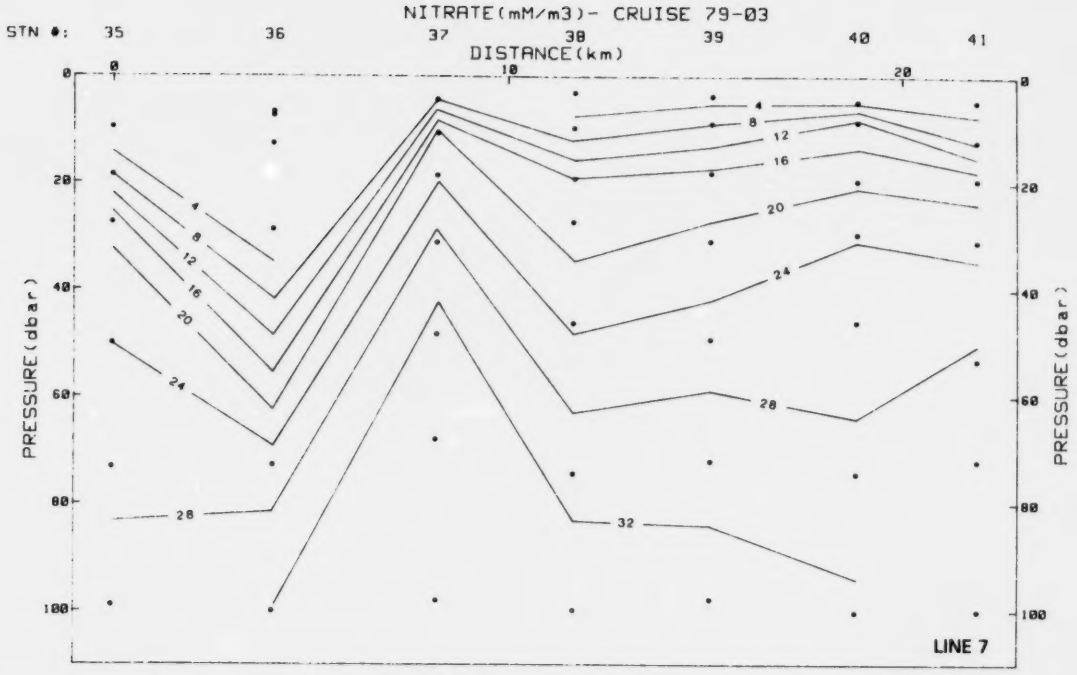

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #: 30 29 28 27
DISTANCE(km)
0 10
PRESSURE(dbar)
0 10 20 30 40 50 60 70 80
0.25
0.5
1.0
1.5
2.0
LINE 5

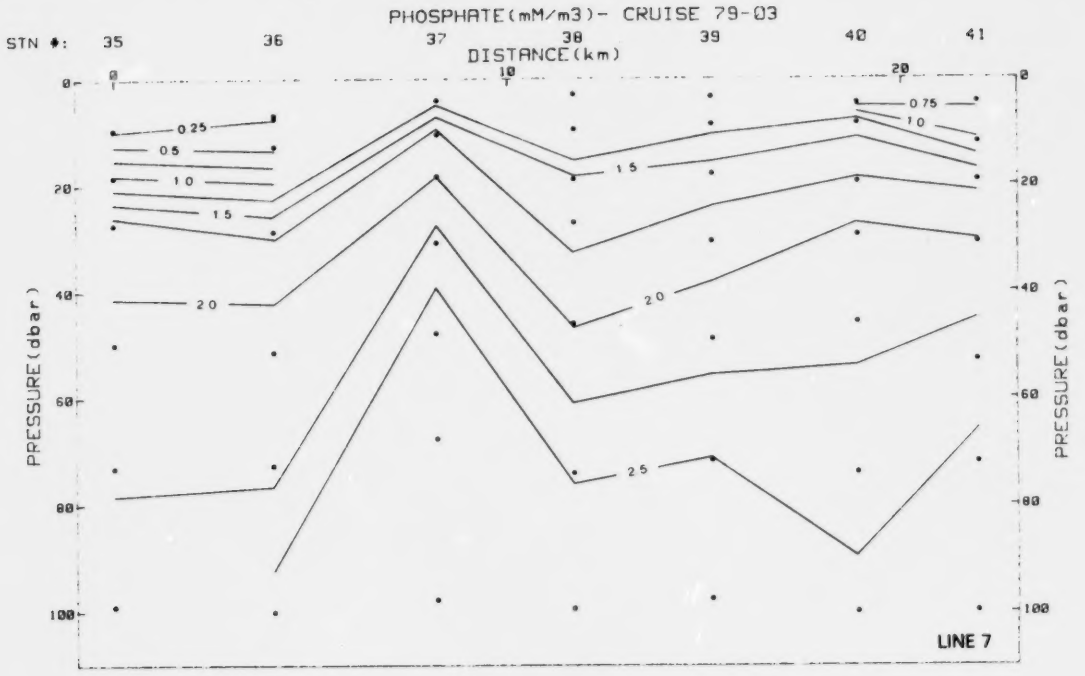

SILICATE(mM/m3)- CRUISE 79-03
STN #: 30 29 28 27
DISTANCE(km)
0 10
PRESSURE(dbar)
0 10 20 30 40 50 60 70 80
5
10
20
30
35
LINE 5

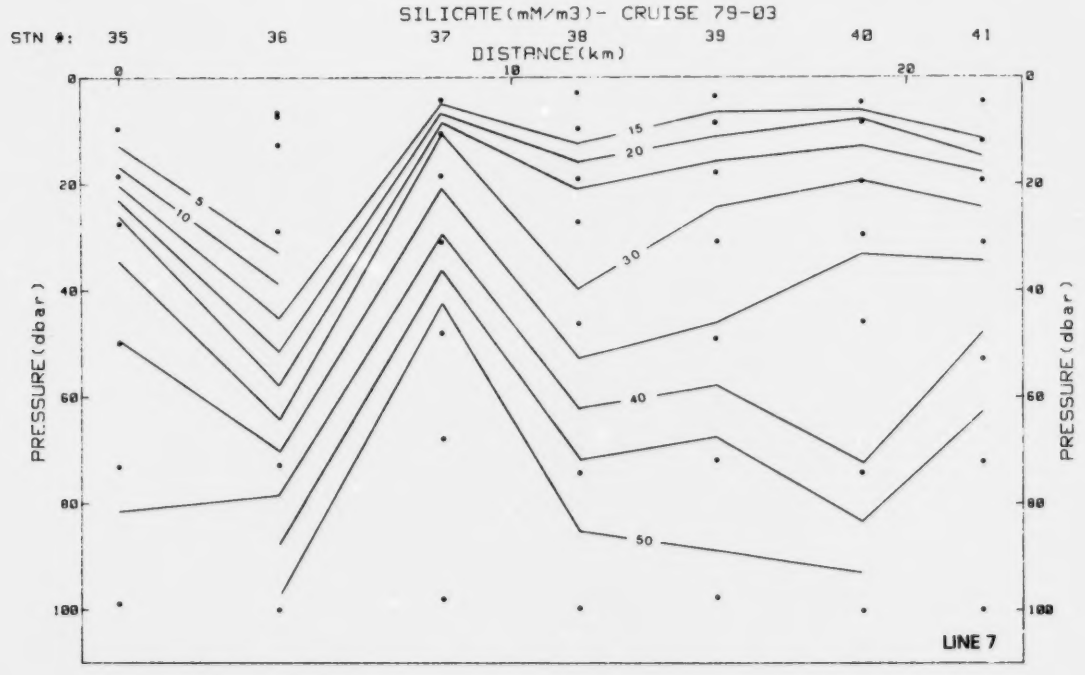

NITRATE(mM/m3)- CRUISE 79-03
STN #:
34
33
32
31
DISTANCE(km)
0
10
PRESSURE(dbar)
0
20
40
60
80
100
4
8
12
16
20
24
28
32
LINE 6

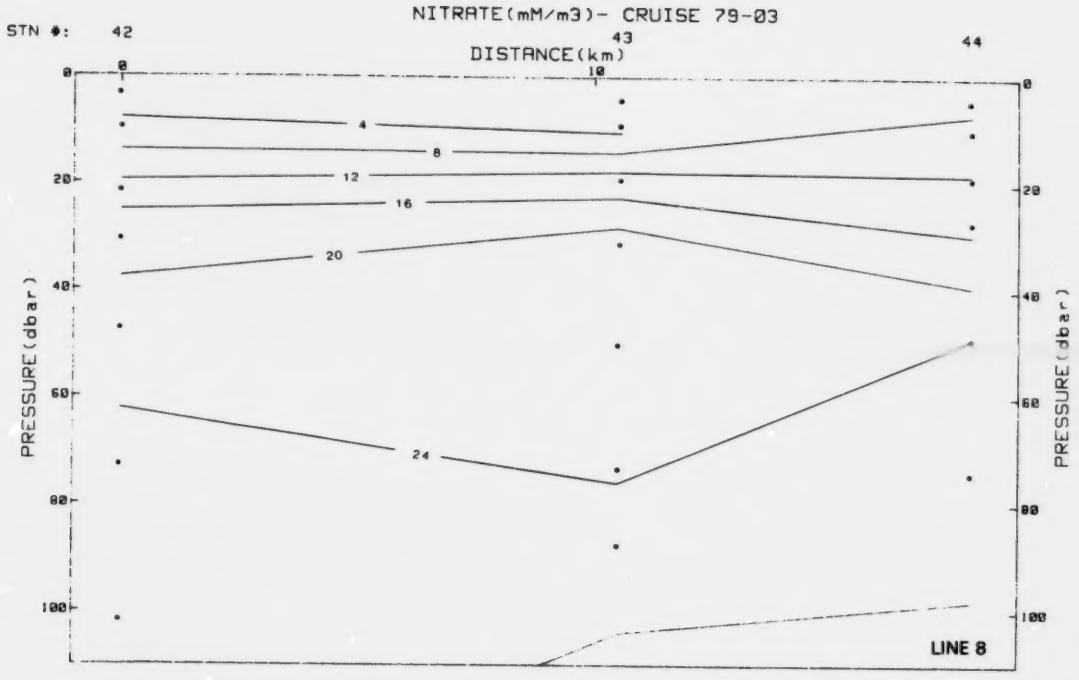

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #:
34
33
32
31
DISTANCE(km)
0
10
0.5
1.0
1.5
2.0
2.5
PRESSURE(dbar)
0
20
40
60
80
100
LINE 6

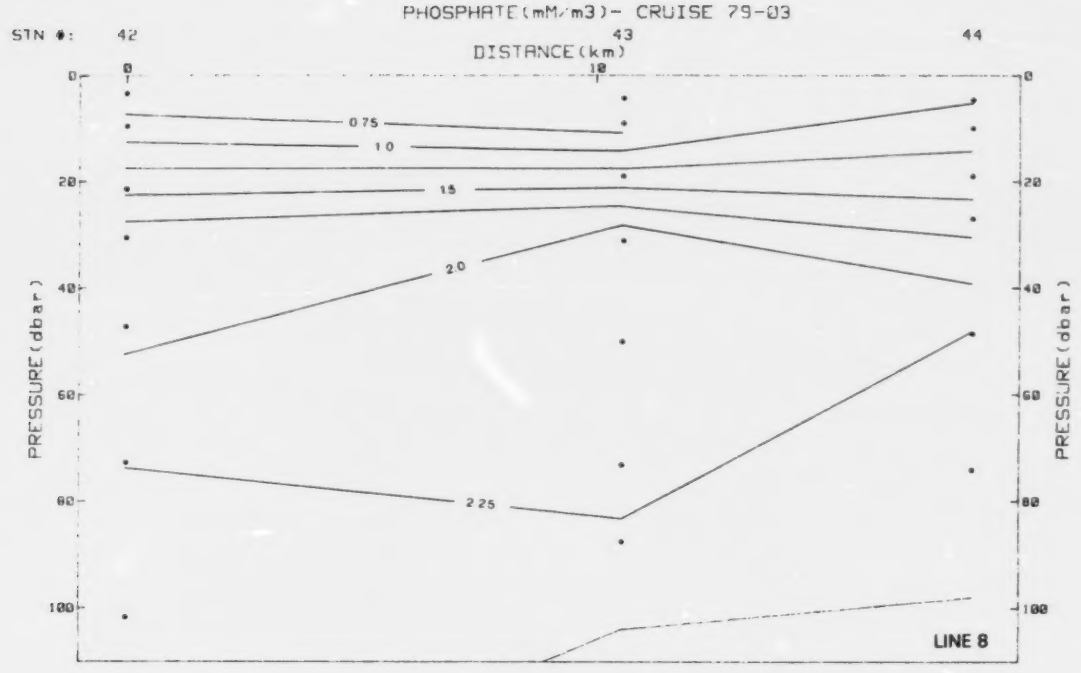

SILICATE(mM/m3)- CRUISE 79-03
STN #:
34
33
32
31
DISTANCE(km)
0
10
5
10
20
30
40
50
PRESSURE(dbar)
0
20
40
60
80
100
LINE 6

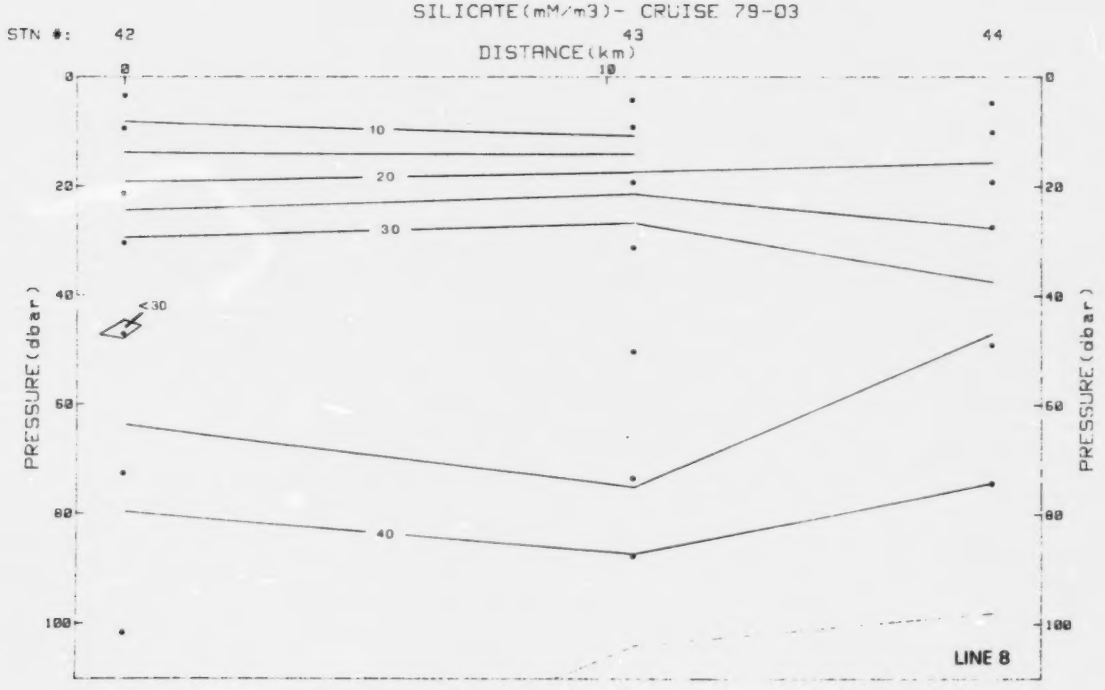

NITRATE(mM/m3)- CRUISE 79-03
STN #: 35 36 37 38 39 40 41
DISTANCE(km)
0 10 20
PRESSURE(dbar)
0 20 40 60 80 100
4 8 12 16 20 24 28 32
LINE 7

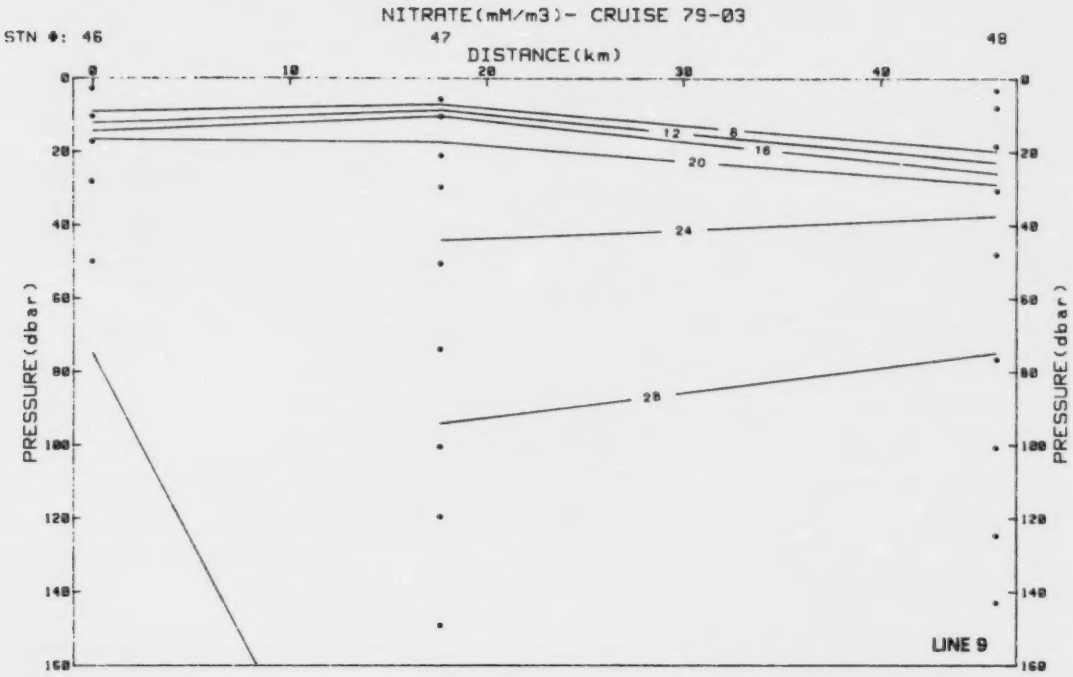

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #: 35 36 37 38 39 40 41
DISTANCE(km)
0 10 20
0.25
0.5
1.0
1.5
2.0
2.5
0.75
1.0
1.5
2.0
PRESSURE(dbar)
0 20 40 60 80 100
LINE 7

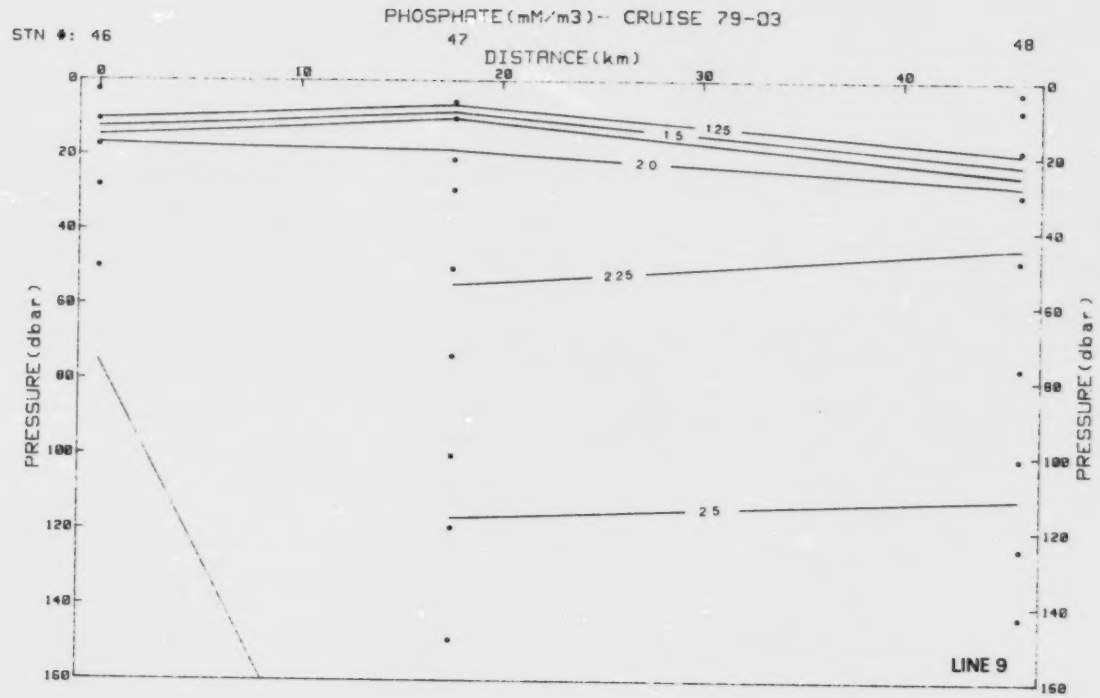

SILICATE(mM/m3)- CRUISE 79-03
STN #: 35 36 37 38 39 40 41
DISTANCE(km)
0 10 20
5
10
15
20
30
40
50
PRESSURE(dbar)
0 20 40 60 80 100
LINE 7

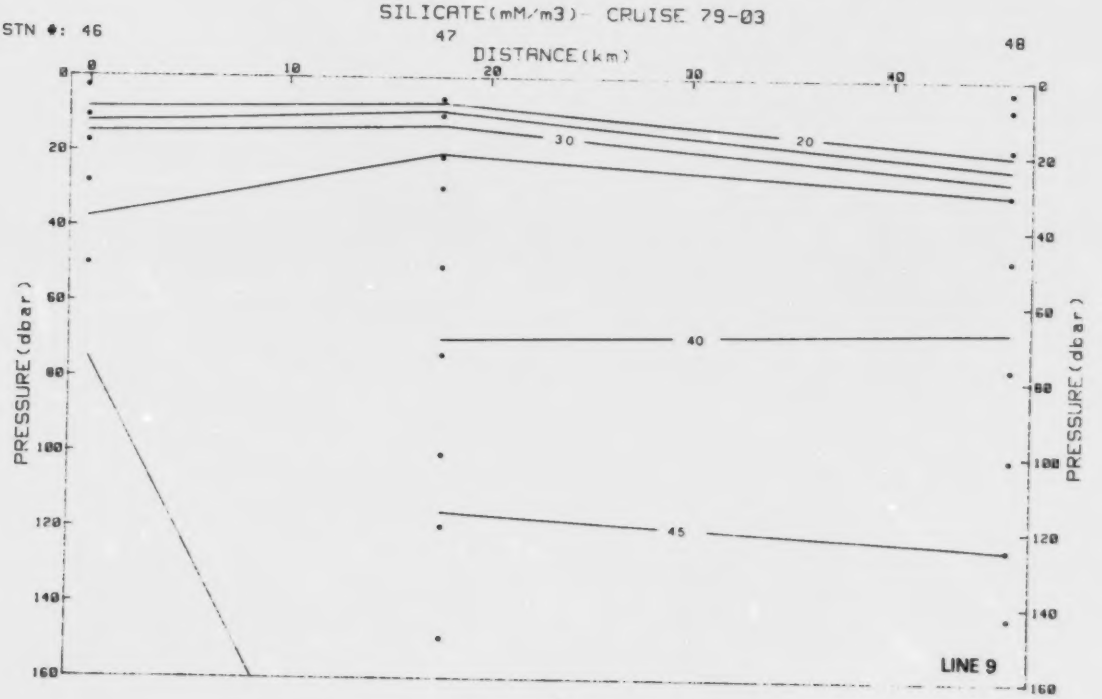

NITRATE(mM/m3)- CRUISE 79-03
STN #: 42 43 44
DISTANCE(km)
0
10
PRESSURE(dbar)
0
20
40
60
80
100
4
8
12
16
20
24
LINE 8

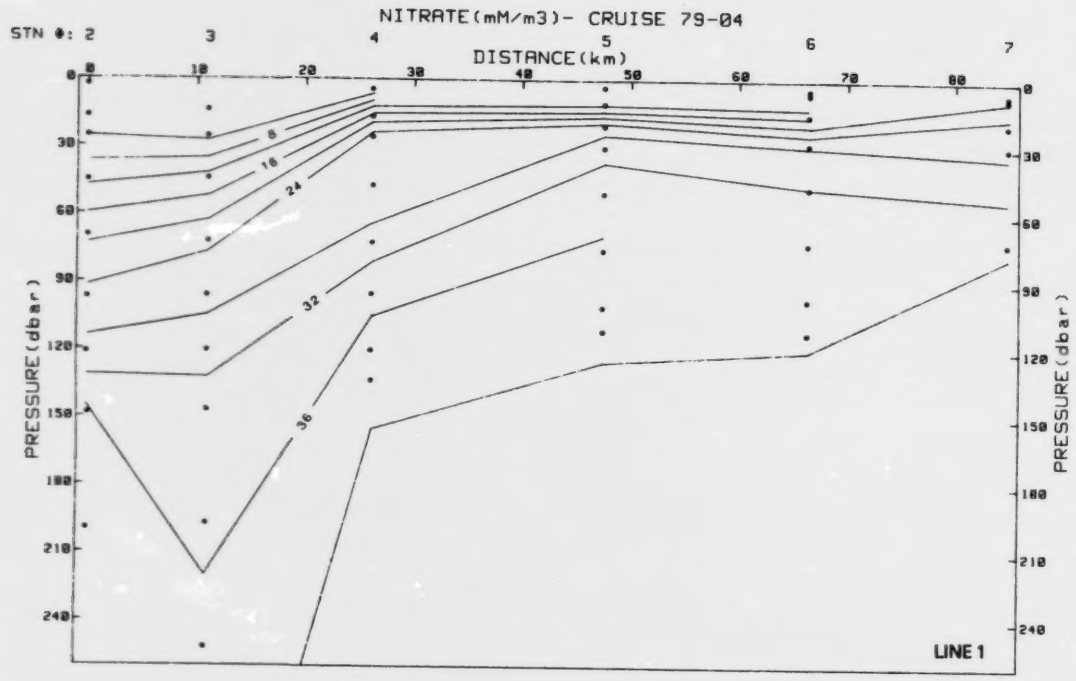

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #: 42 43 44
DISTANCE(km)
0 10
0.75
1.0
1.5
2.0
2.25
PRESSURE(dbar)
0 20 40 60 80 100
LINE 8

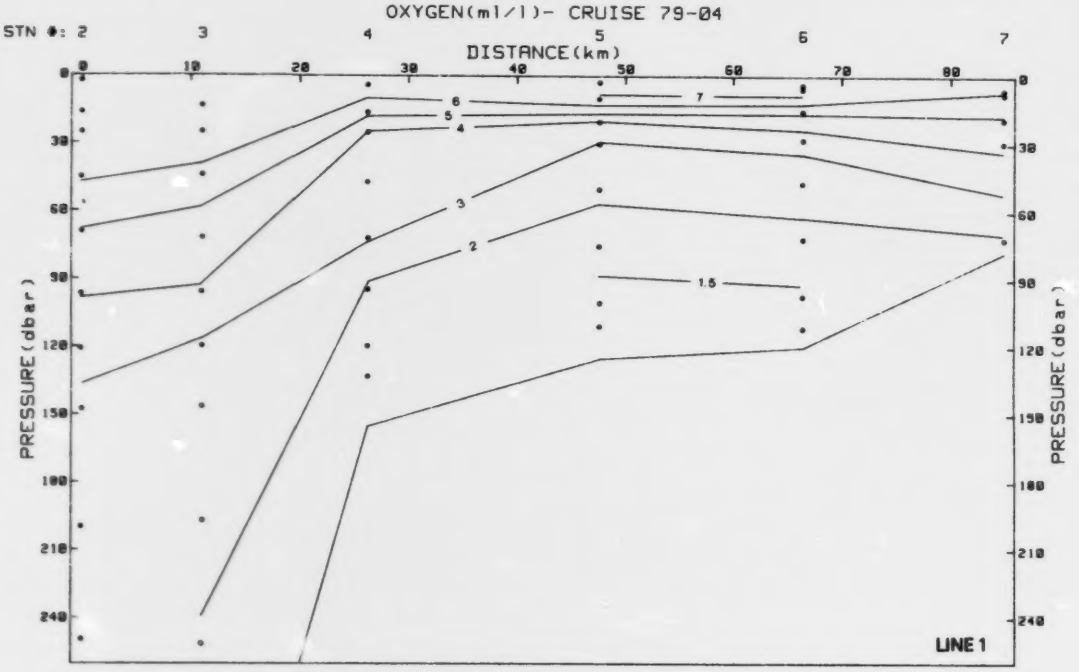

SILICATE(mM/m3)- CRUISE 79-03
STN #: 42 43 44
DISTANCE(km)
0 10
10
20
30
40
<30
PRESSURE(dbar)
0 20 40 60 80 100
LINE 8

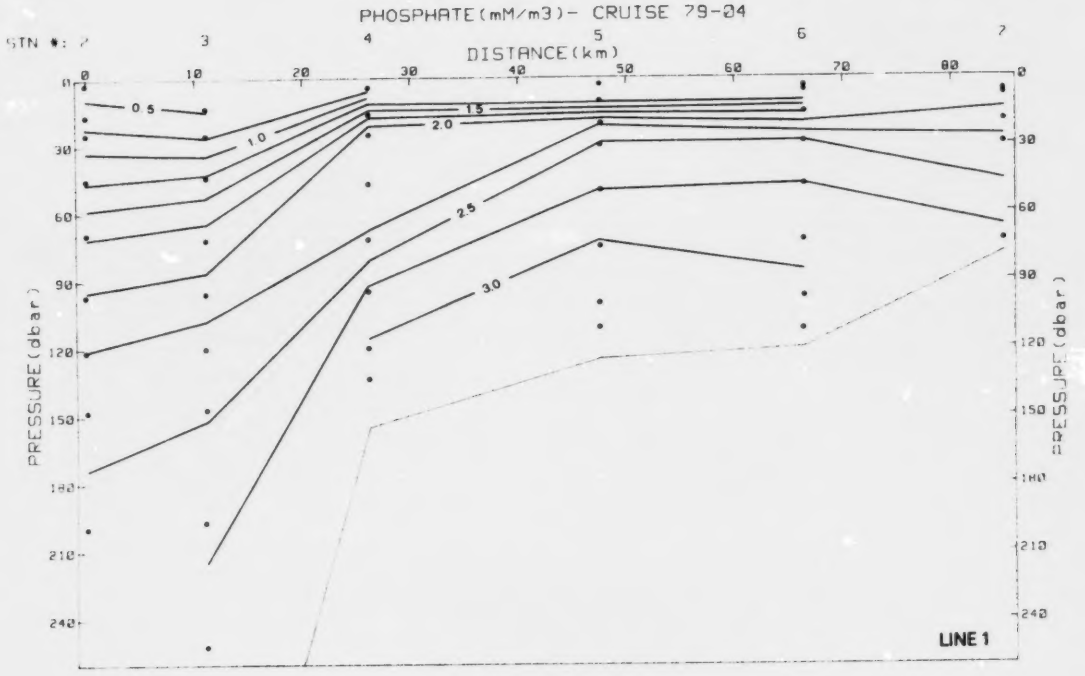

NITRATE(mM/m3)- CRUISE 79-03
STN #: 46
47
48
DISTANCE(km)
0
10
20
30
40
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
4
8
12
16
20
24
28
LINE 9

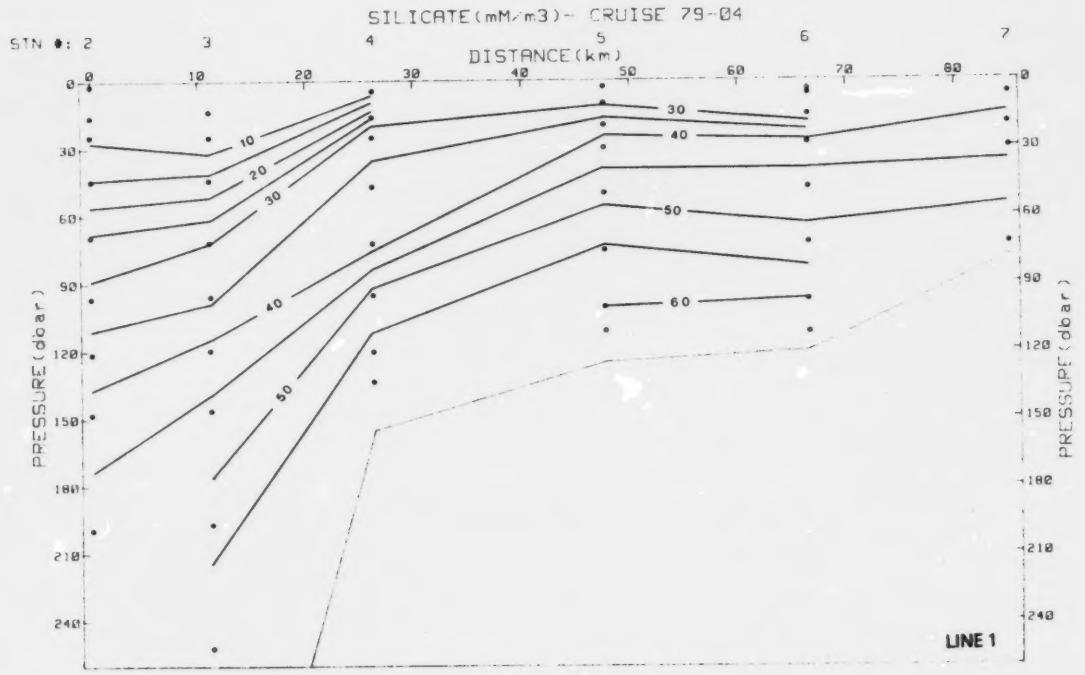

PHOSPHATE(mM/m3)- CRUISE 79-03
STN #: 46
47
48
DISTANCE(km)
0
10
20
30
40
1.5
1.25
2.0
2.25
2.5
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
LINE 9

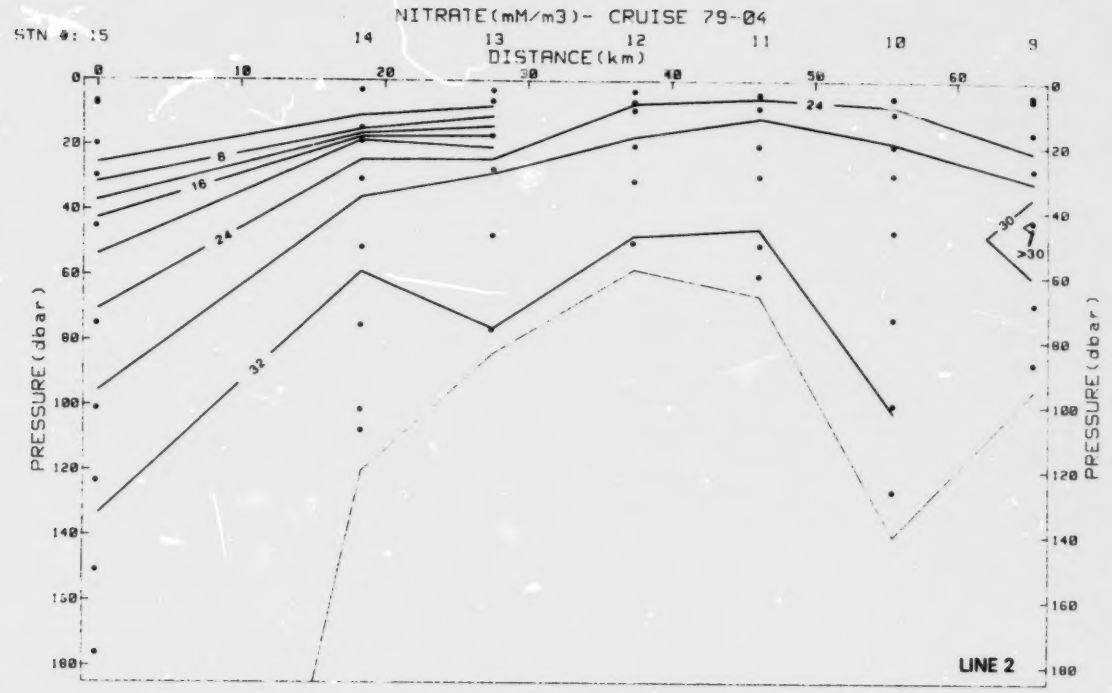

SILICATE(mM/m3)- CRUISE 79-03
STN #: 46
47
48
DISTANCE(km)
0
10
20
30
40
3.0
2.0
4.0
4.5
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
LINE 9

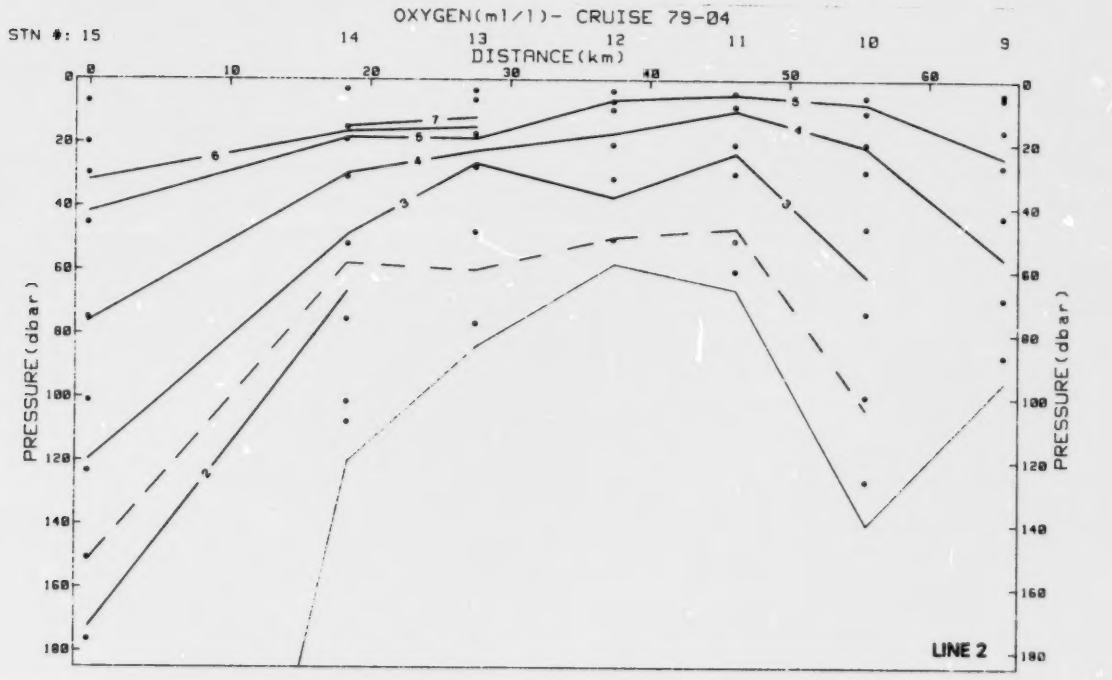

NITRATE(mM/m3)- CRUISE 79-04
STN #: 2
3
4
5
6
7
DISTANCE(km)
0
10
20
30
40
50
60
70
80
8
16
24
32
36
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 1

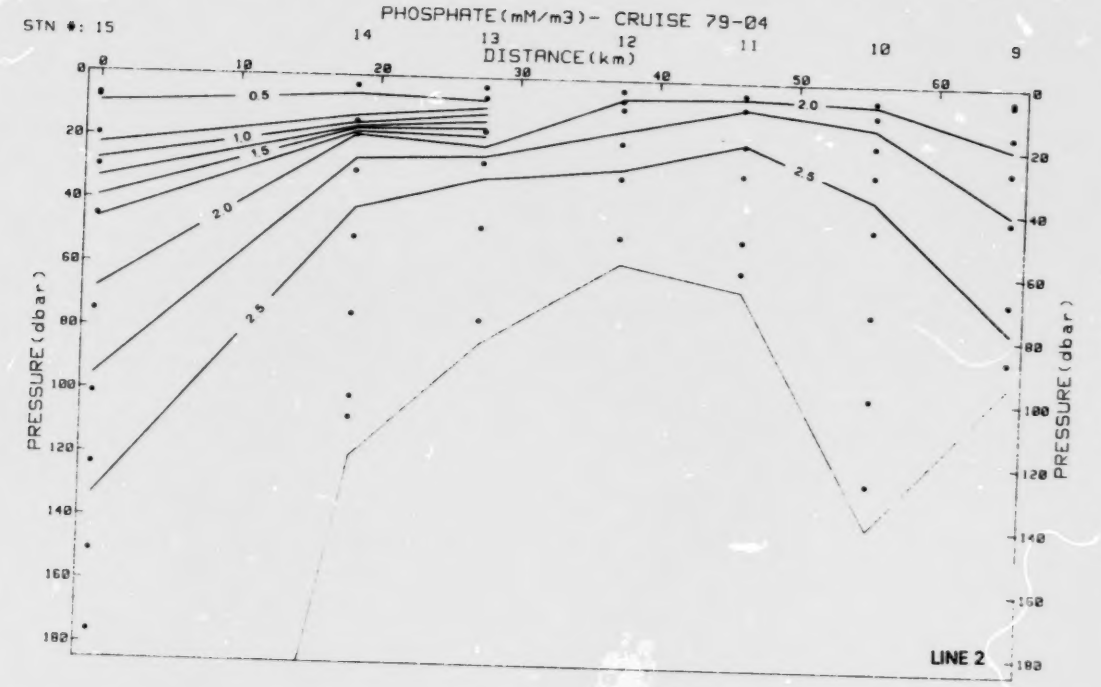

OXYGEN(ml/l)- CRUISE 79-04
STN #: 2
3
4
5
6
7
DISTANCE(km)
0
10
20
30
40
50
60
70
80
7
6
5
4
3
2
1.5
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 1

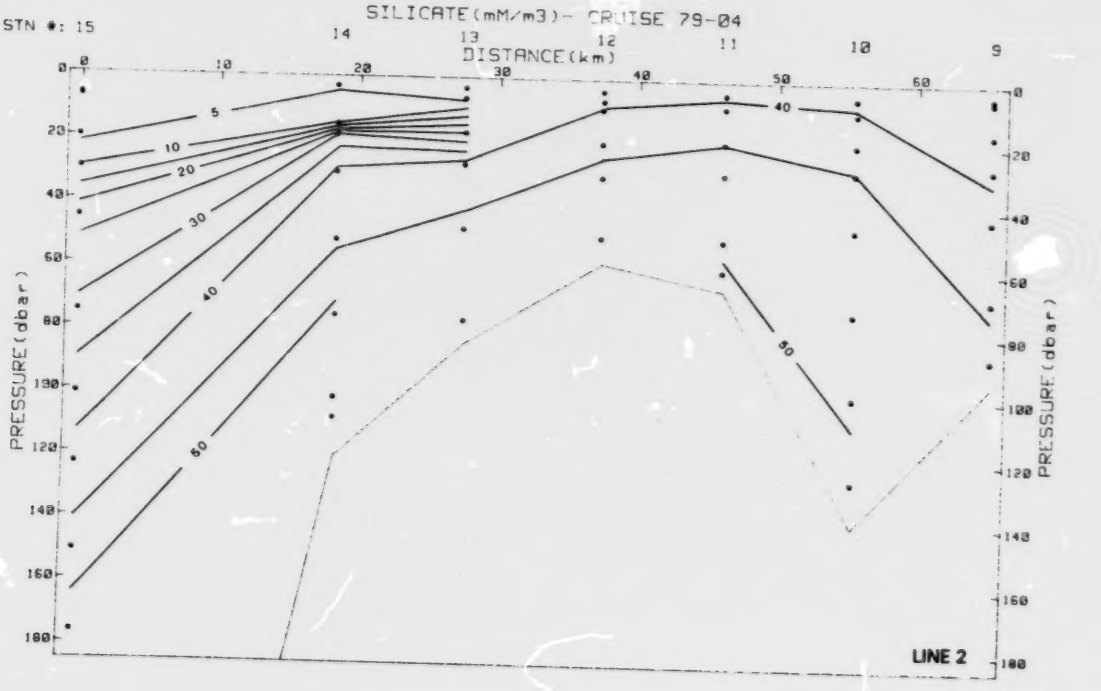

PHOSPHATE(mM/m3)- CRUISE 79-04
STN #: 2 3 4 5 6 7
DISTANCE(km)
0 10 20 30 40 50 60 70 80
0.5
1.0
1.5
2.0
2.5
3.0
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
LINE 1

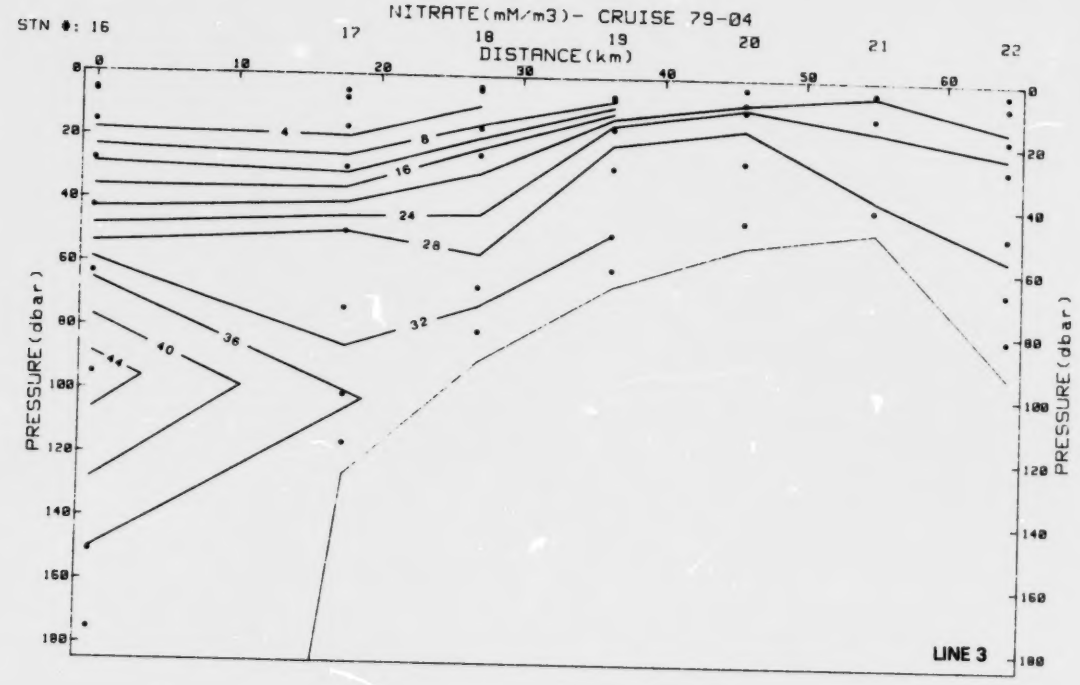

SILICATE(mM/m3)- CRUISE 79-04
STN #: 2 3 4 5 6 7
DISTANCE(km)
0 10 20 30 40 50 60 70 80
10
20
30
40
50
60
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
LINE 1

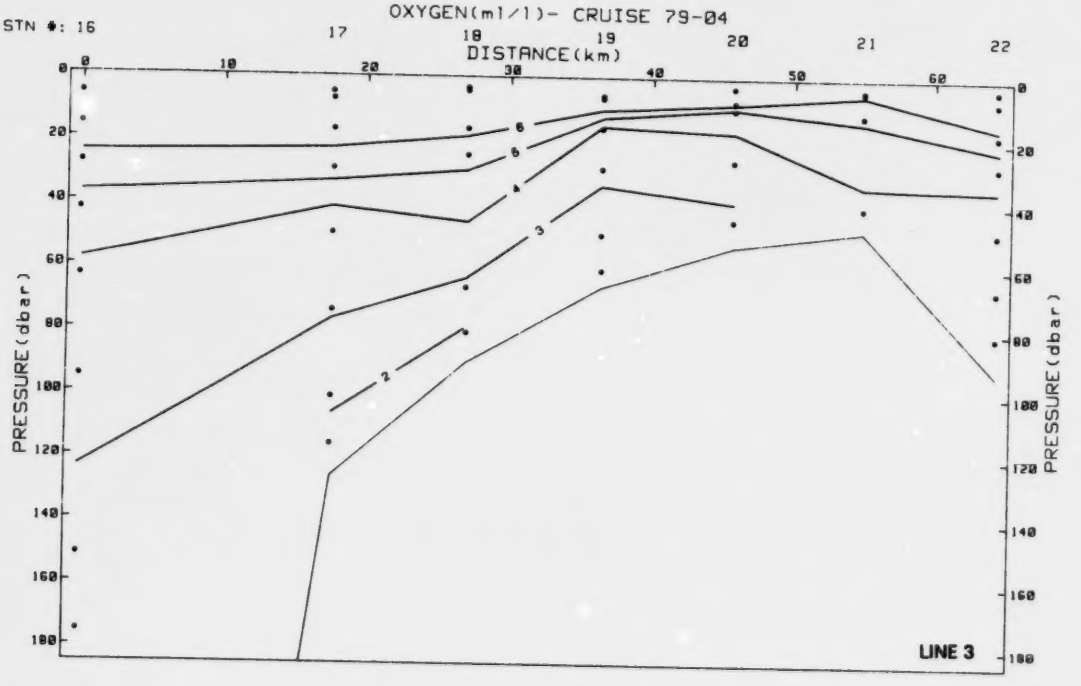

NITRATE(mM/m3)- CRUISE 79-04
STN #: 15
14
13
12
11
10
9
DISTANCE(km)
0
10
20
30
40
50
60
PRESSURE(dbar)
0
20
40
60
80
100
120
140
150
160
180
8
16
24
32
24
30
>30
LINE 2

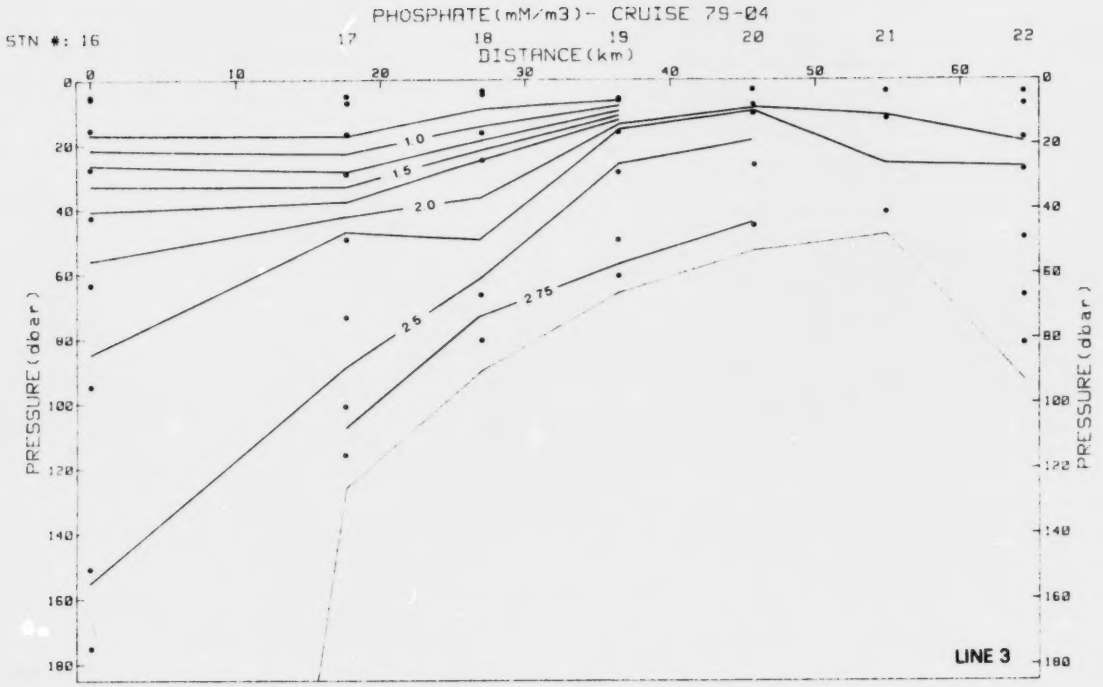

OXYGEN(ml/l)- CRUISE 79-04
STN #: 15
14
13
12
11
10
9
DISTANCE(km)
0
10
20
30
40
50
60
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
180
7
6
5
4
3
2
5
4
3
LINE 2

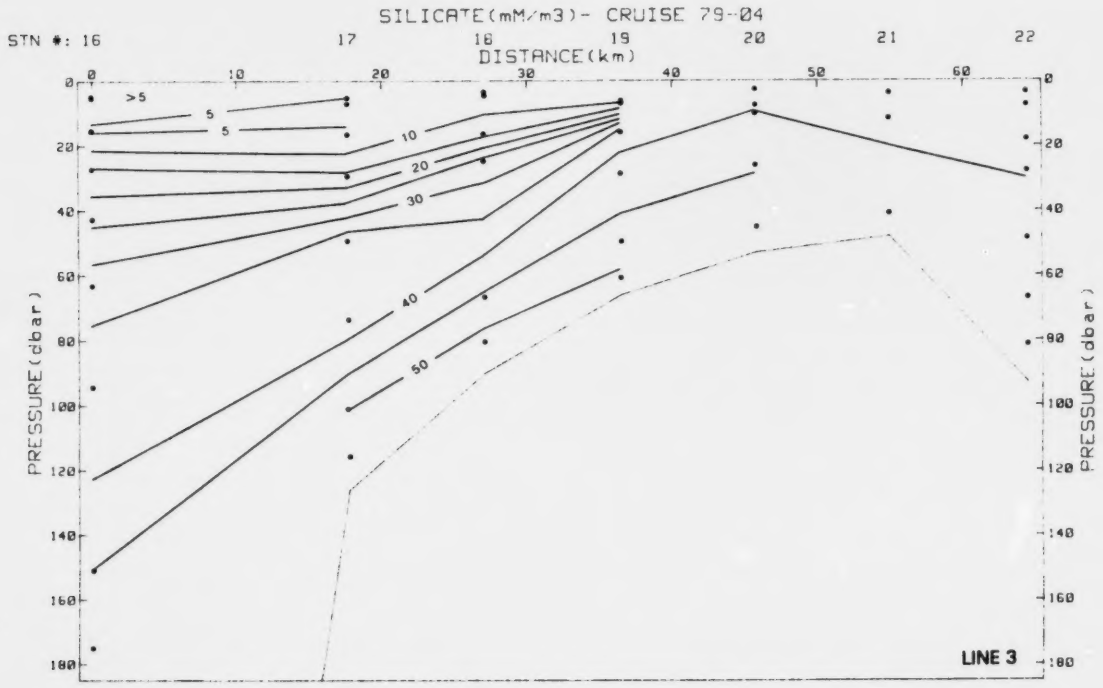

PHOSPHATE(mM/m3)- CRUISE 79-04
STN #: 15
DISTANCE(km)
14
13
12
11
10
9
0
10
20
30
40
50
60
0.5
1.0
1.5
2.0
2.5
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
180
LINE 2

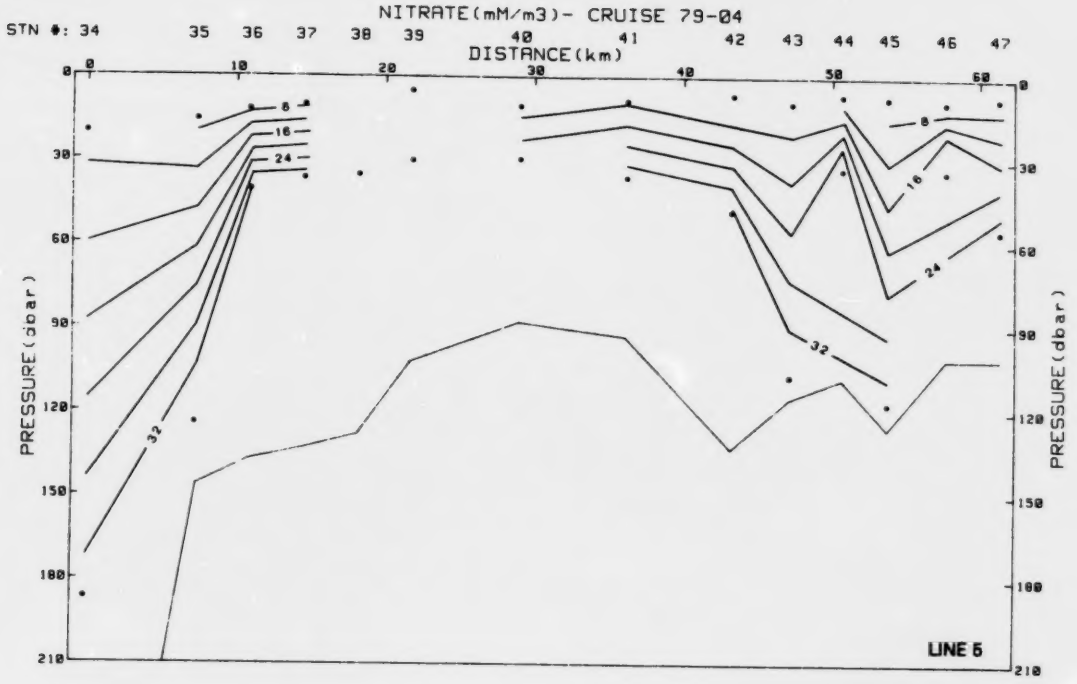

SILICATE(mM/m3)- CRUISE 79-04
STN #: 15
DISTANCE(km)
14
13
12
11
10
9
0
10
20
30
40
50
60
5
10
20
30
40
50
60
PRESSURE(dbar)
0
20
40
60
80
100
120
140
160
180
LINE 2

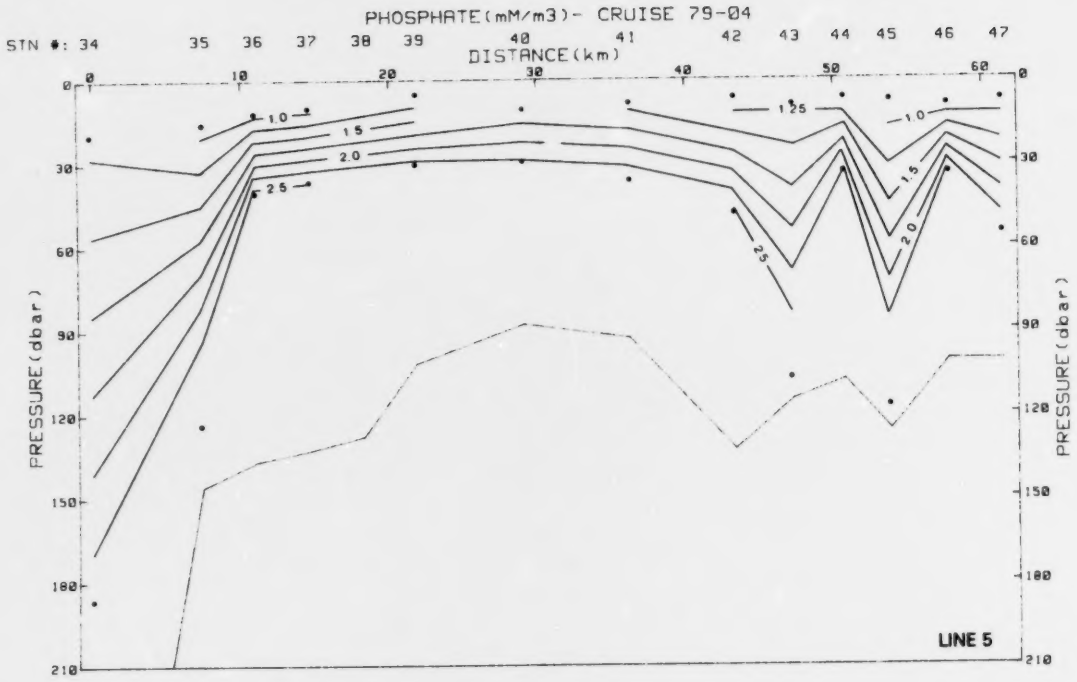

NITRATE(mM/m3)- CRUISE 79-04
STN #: 16
DISTANCE(km)
PRESSURE(dbar)
LINE 3

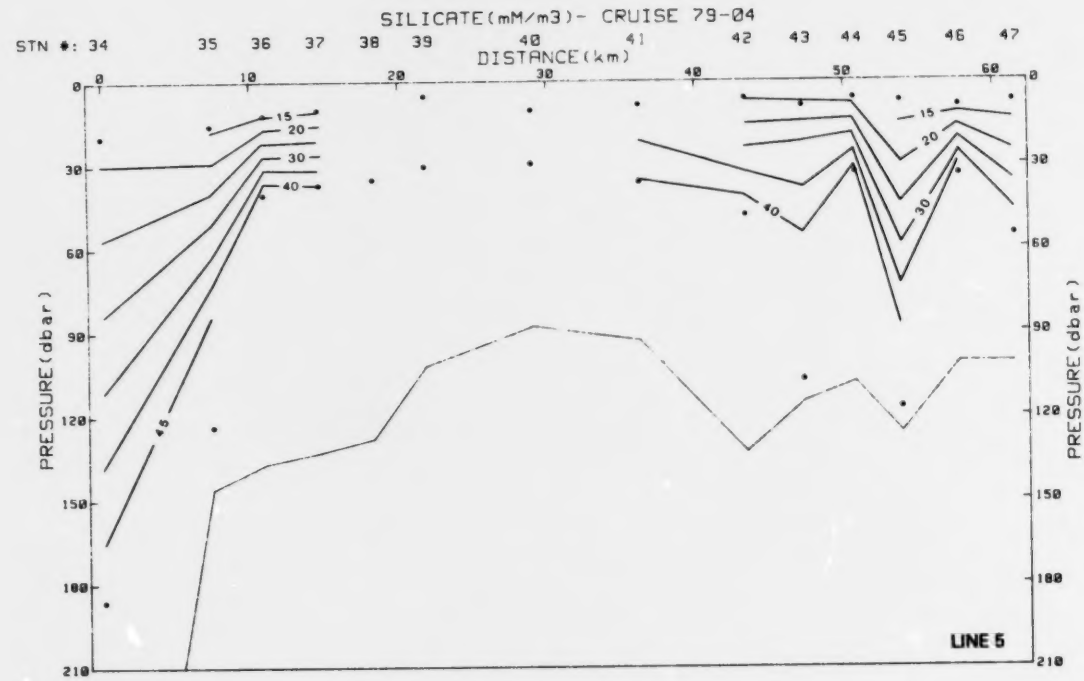

OXYGEN(ml/l)- CRUISE 79-04
STN #: 16
DISTANCE(km)
PRESSURE(dbar)
LINE 3

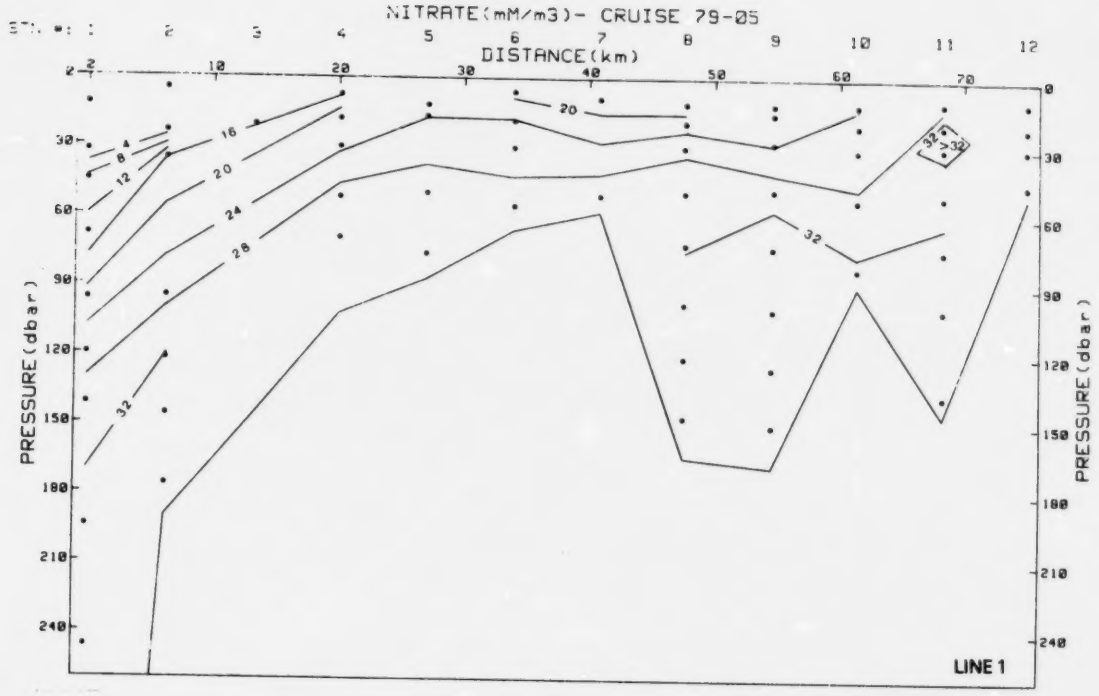

PHOSPHATE(mM/m3)- CRUISE 79-04
STN #: 16 17 18 19 20 21 22
DISTANCE(km)
0 10 20 30 40 50 60
PRESSURE(dbar)
0 20 40 60 80 100 120 140 160 180
1.0
1.5
2.0
2.5
2.75
LINE 3

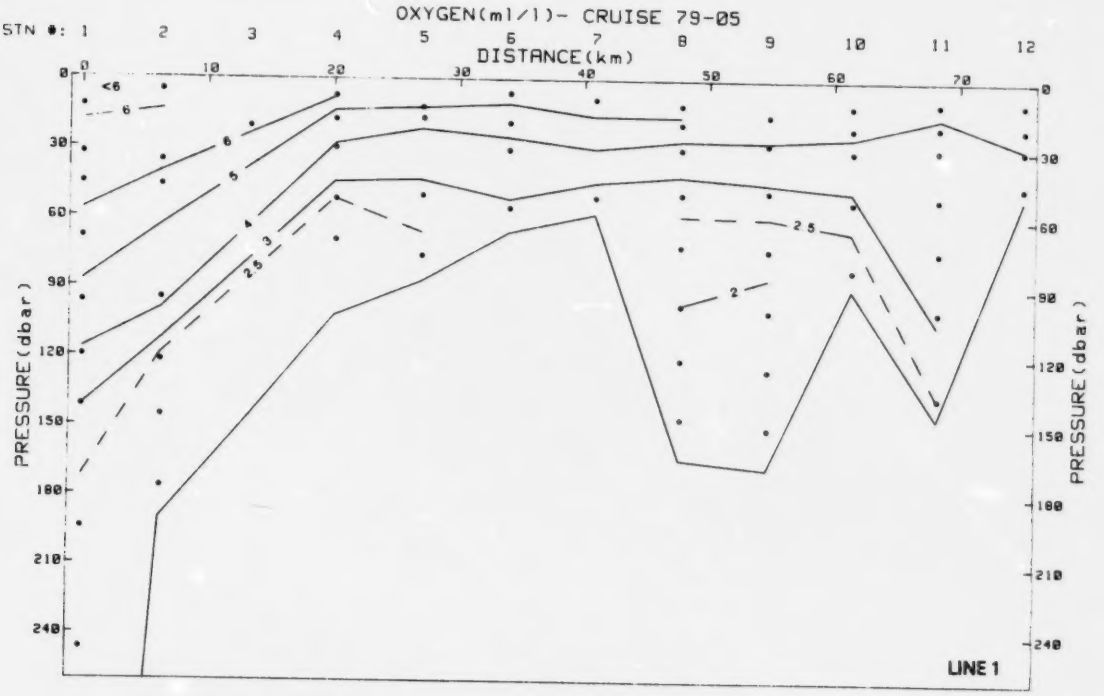

SILICATE(mM/m3)- CRUISE 79-04
STN #: 16 17 18 19 20 21 22
DISTANCE(km)
0 10 20 30 40 50 60
PRESSURE(dbar)
0 20 40 60 80 100 120 140 160 180
>5
5
5
10
20
30
40
50
LINE 3

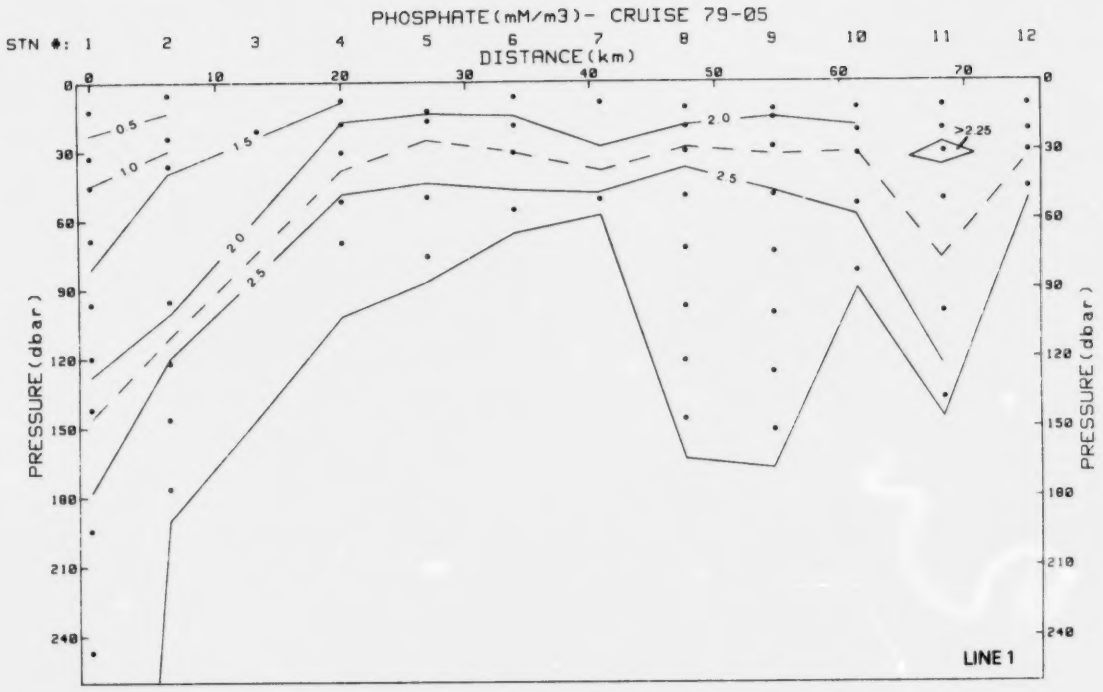

NITRATE(mM/m3)- CRUISE 79-04
STN #: 34 35 36 37 38 39 40 41 42 43 44 45 46 47
DISTANCE(km)
0 10 20 30 40 50 60
PRESSURE(dbar)
0 30 60 90 120 150 180 210
8
16
24
32
LINE 5

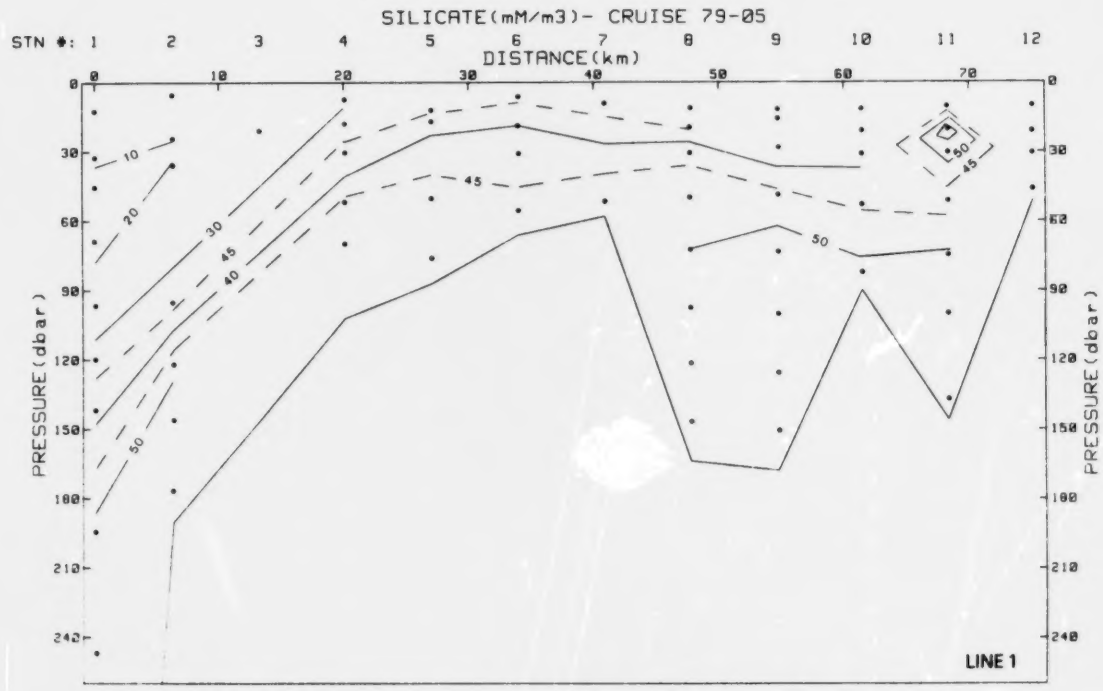

PHOSPHATE(mM/m3)- CRUISE 79-04
STN #: 34 35 36 37 38 39 40 41 42 43 44 45 46 47
DISTANCE(km)
0 10 20 30 40 50 60
PRESSURE(dbar)
0 30 60 90 120 150 180 210
1.0
1.5
2.0
2.5
1.25
LINE 5

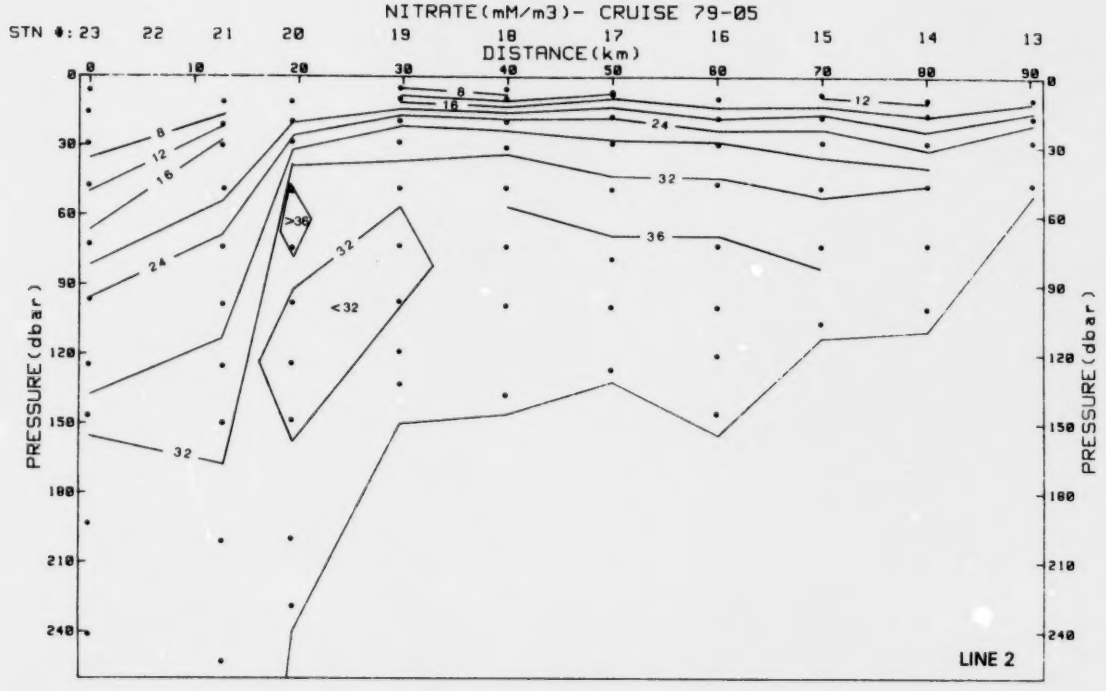

SILICATE(mM/m3)- CRUISE 79-04
STN #: 34 35 36 37 38 39 40 41 42 43 44 45 46 47
DISTANCE(km)
0 10 20 30 40 50 60
PRESSURE(dbar)
0 30 60 90 120 150 180 210
15
20
30
40
45
LINE 5

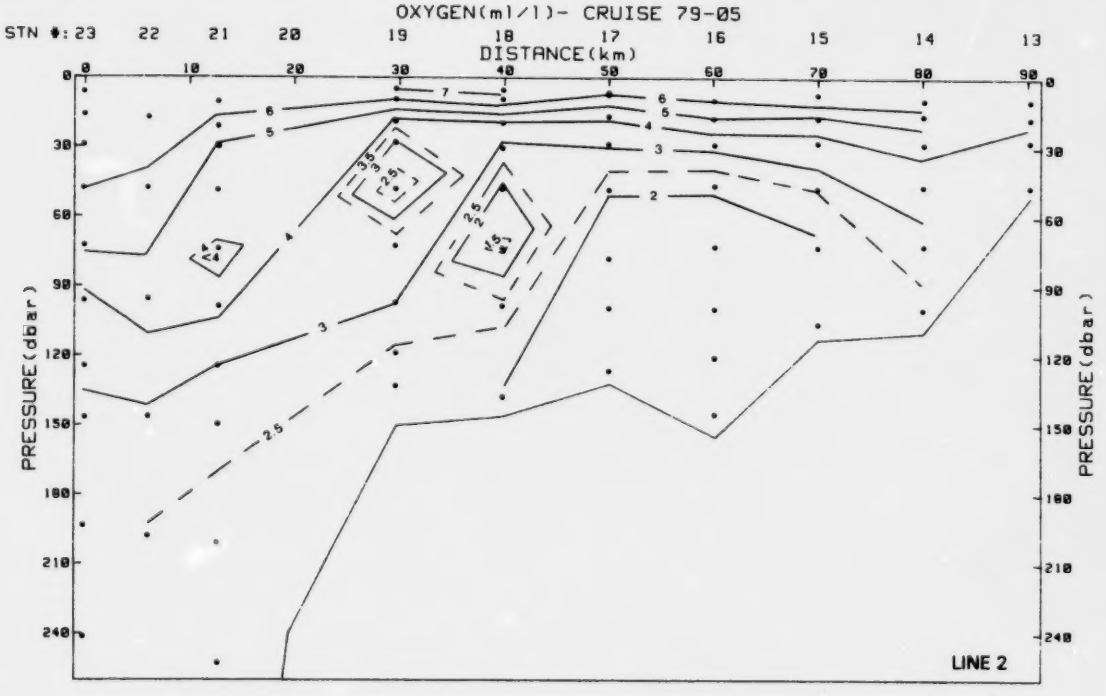

NITRATE(mM/m3)- CRUISE 79-05
STN #: 1 2 3 4 5 6 7 8 9 10 11 12
DISTANCE(km)
PRESSURE(dbar)
LINE 1

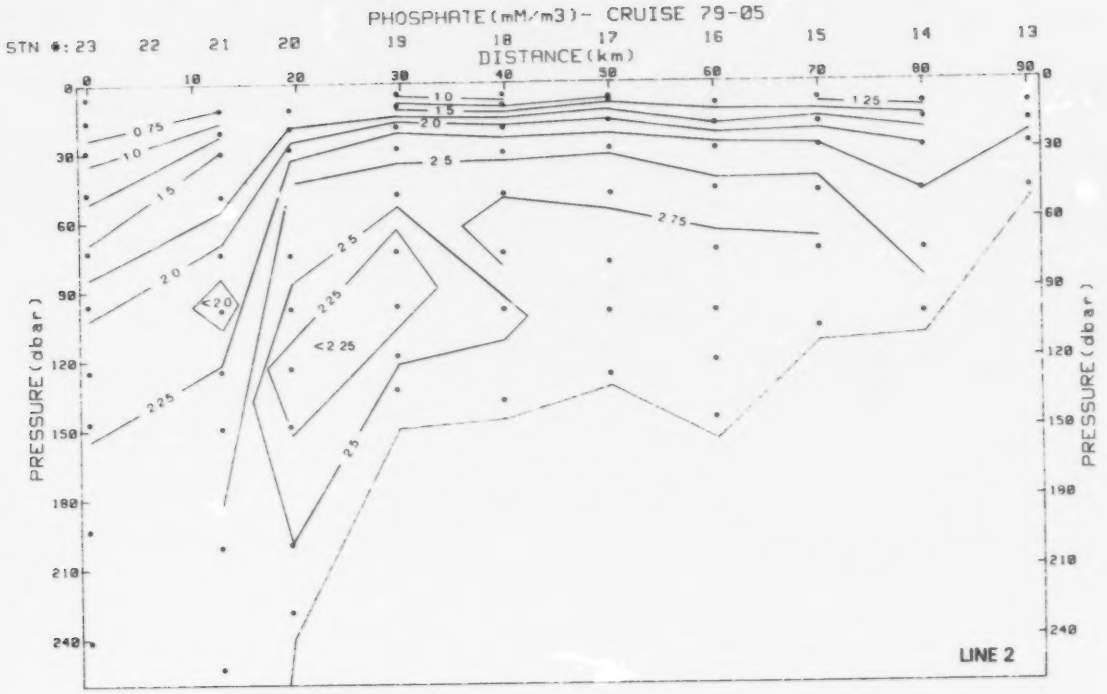

OXYGEN(ml/l)- CRUISE 79-05
STN #: 1 2 3 4 5 6 7 8 9 10 11 12
DISTANCE(km)
PRESSURE(dbar)
LINE 1

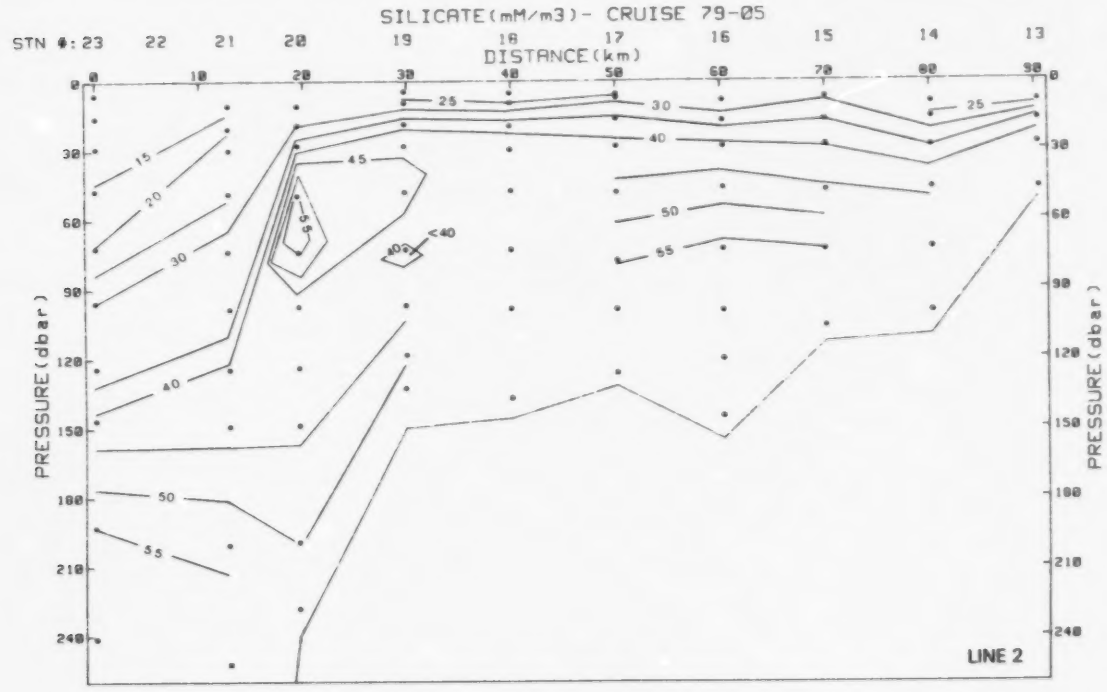

PHOSPHATE(mM/m3)- CRUISE 79-05
STN #: 1 2 3 4 5 6 7 8 9 10 11 12
DISTANCE(km)
0 10 20 30 40 50 60 70
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
0.5
1.0
1.5
2.0
2.5
>2.25
LINE 1

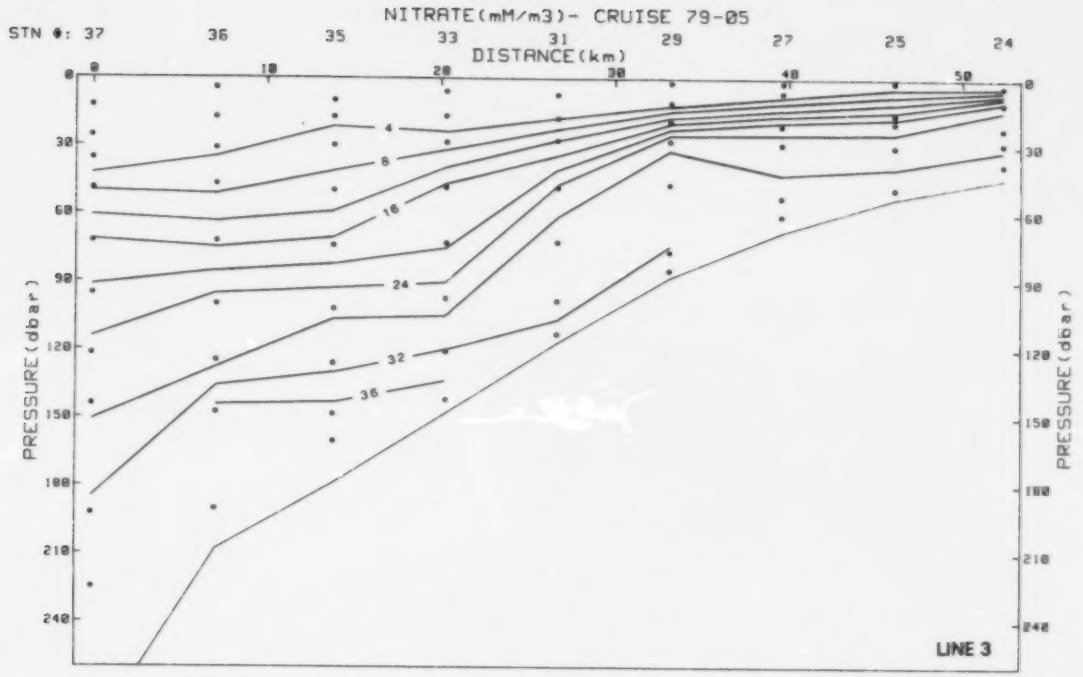

SILICATE(mM/m3)- CRUISE 79-05
STN #: 1 2 3 4 5 6 7 8 9 10 11 12
DISTANCE(km)
0 10 20 30 40 50 60 70
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
10
20
30
45
40
50
LINE 1

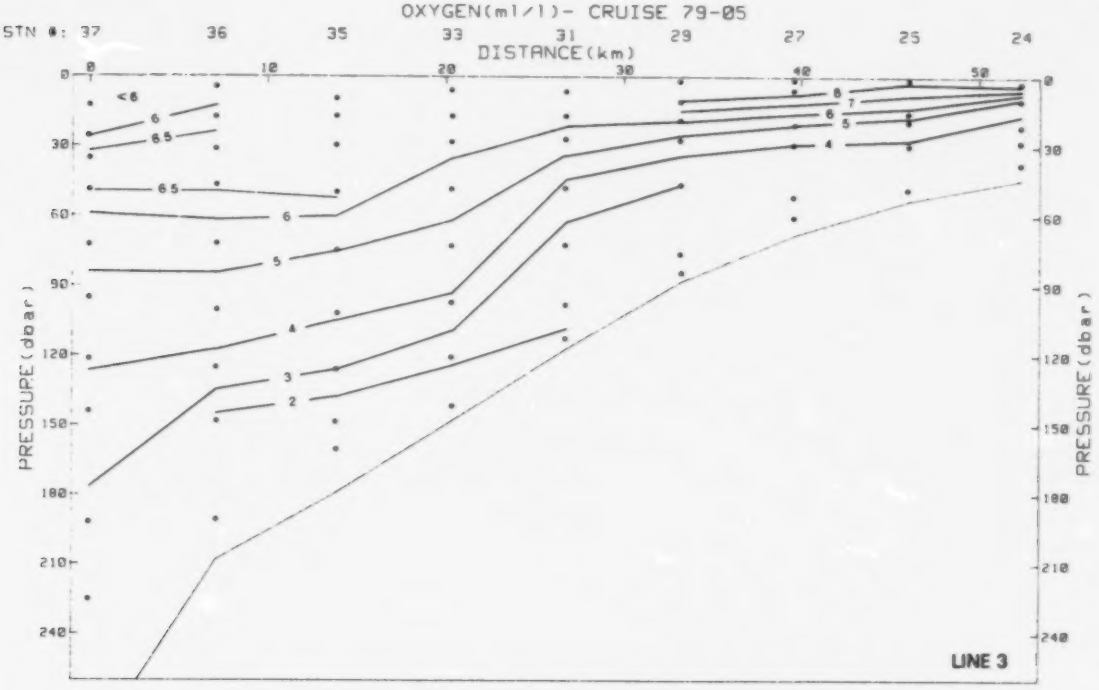

NITRATE(mM/m3)- CRUISE 79-05
STN #: 23 22 21 20 19 18 17 16 15 14 13
DISTANCE(km)
0 10 20 30 40 50 60 70 80 90
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
8
12
16
24
32
36
>36
<32
LINE 2

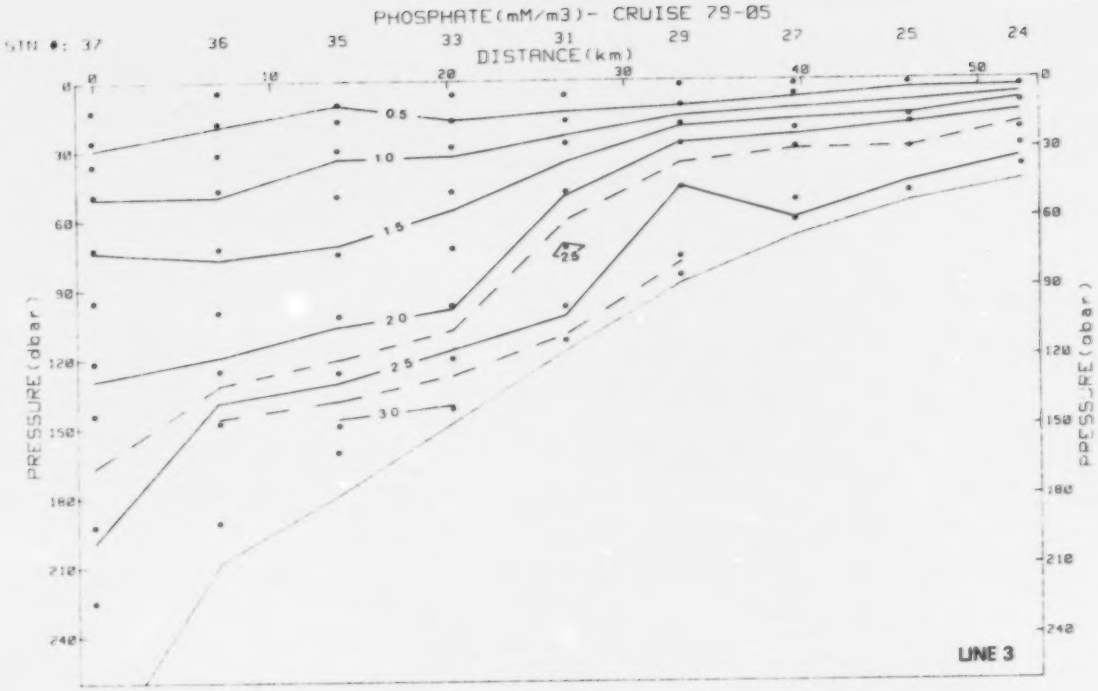

OXYGEN(ml/l)- CRUISE 79-05
STN #: 23 22 21 20 19 18 17 16 15 14 13
DISTANCE(km)
0 10 20 30 40 50 60 70 80 90
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
7
6
5
4
3
2
3.5
2.5
1.5
LINE 2

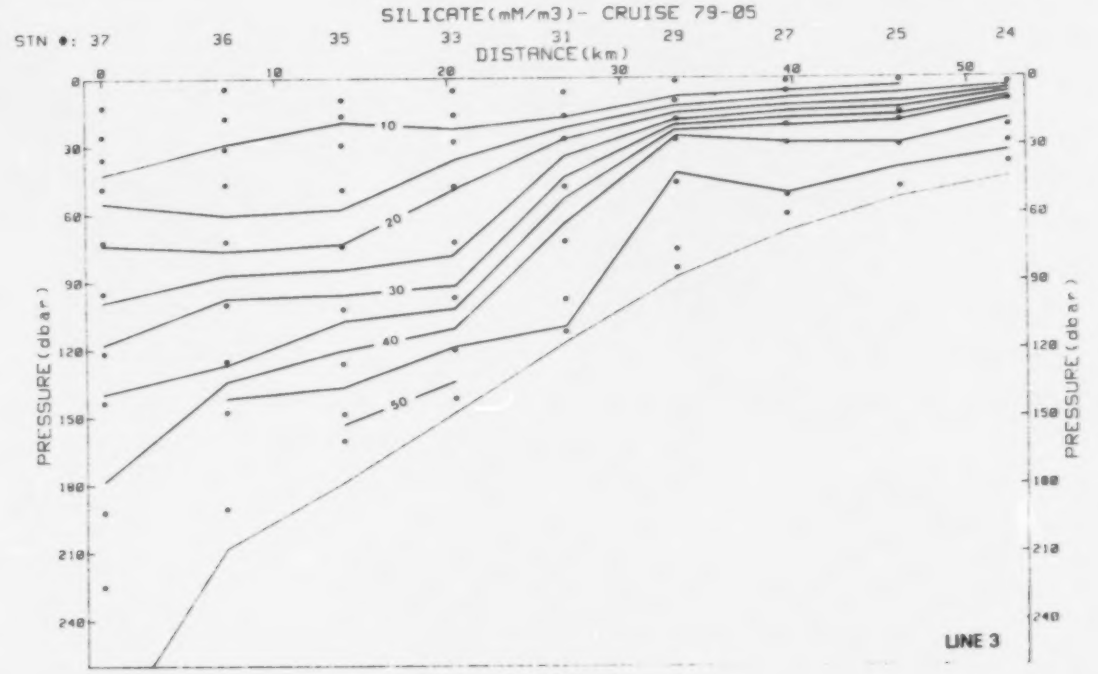

PHOSPHATE(mM/m3)- CRUISE 79-05
STN #: 23 22 21 20 19 18 17 16 15 14 13
DISTANCE(km)
0 10 20 30 40 50 60 70 80 90
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
0.75
1.0
1.5
2.0
2.5
2.75
1.25
<2.0
2.25
<2.25
LINE 2

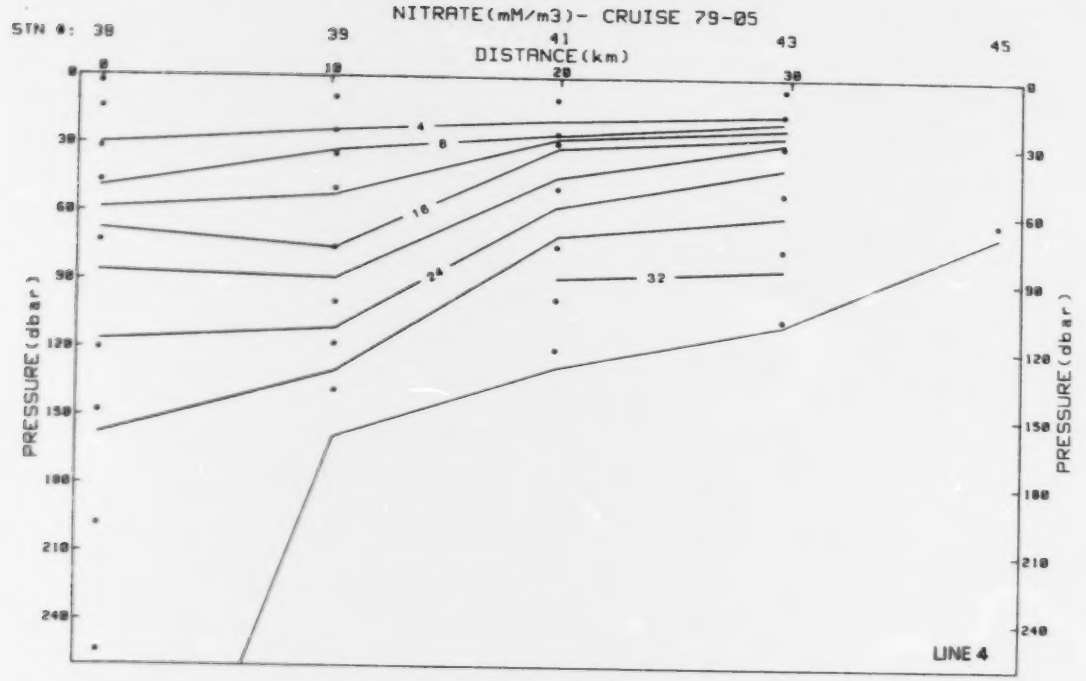

SILICATE(mM/m3)- CRUISE 79-05
STN #: 23 22 21 20 19 18 17 16 15 14 13
DISTANCE(km)
0 10 20 30 40 50 60 70 80 90
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
15
20
30
40
45
<40
25
30
50
55
LINE 2

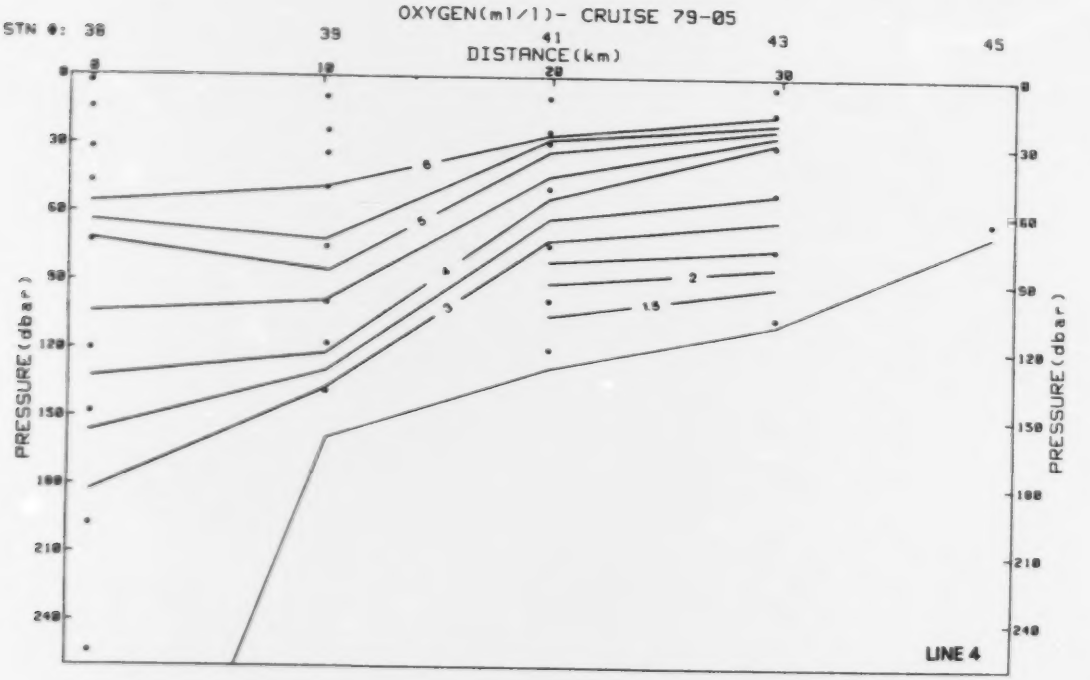

NITRATE(mM/m3)- CRUISE 79-05
STN #: 37 36 35 33 31 29 27 25 24
DISTANCE(km)
0 10 20 30 40 50
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
4
8
16
24
32
36
LINE 3

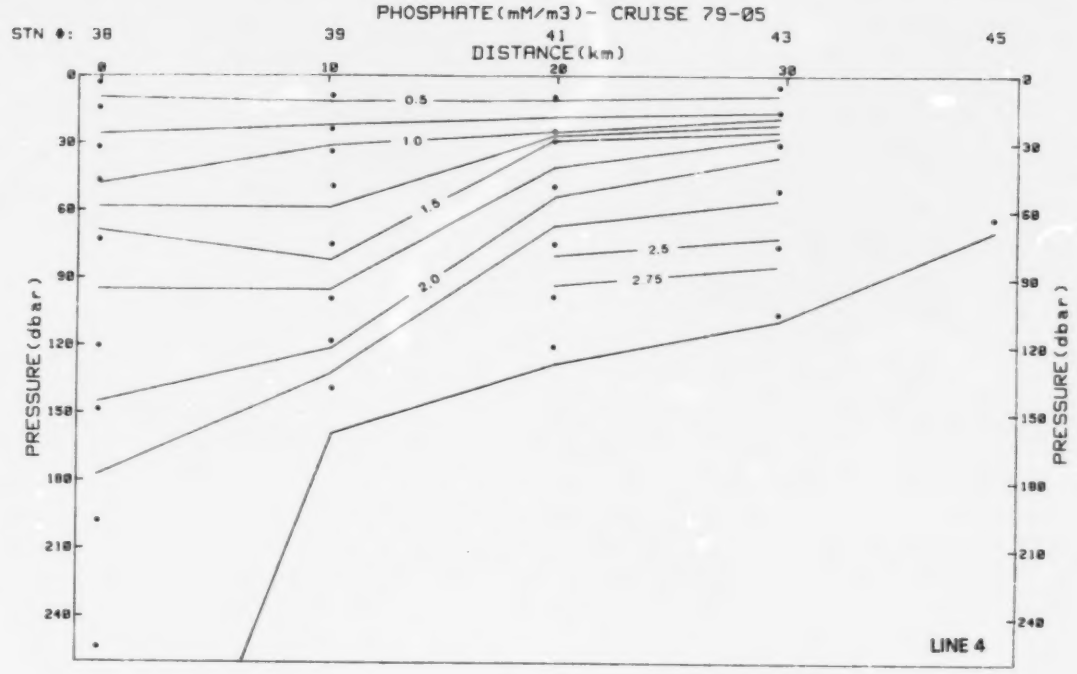

OXYGEN(ml/l)- CRUISE 79-05
STN #: 37 36 35 33 31 29 27 25 24
DISTANCE(km)
0 10 20 30 40 50
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
<6
6
6.5
6.5
6
5
4
3
2
8
7
6
5
4
LINE 3

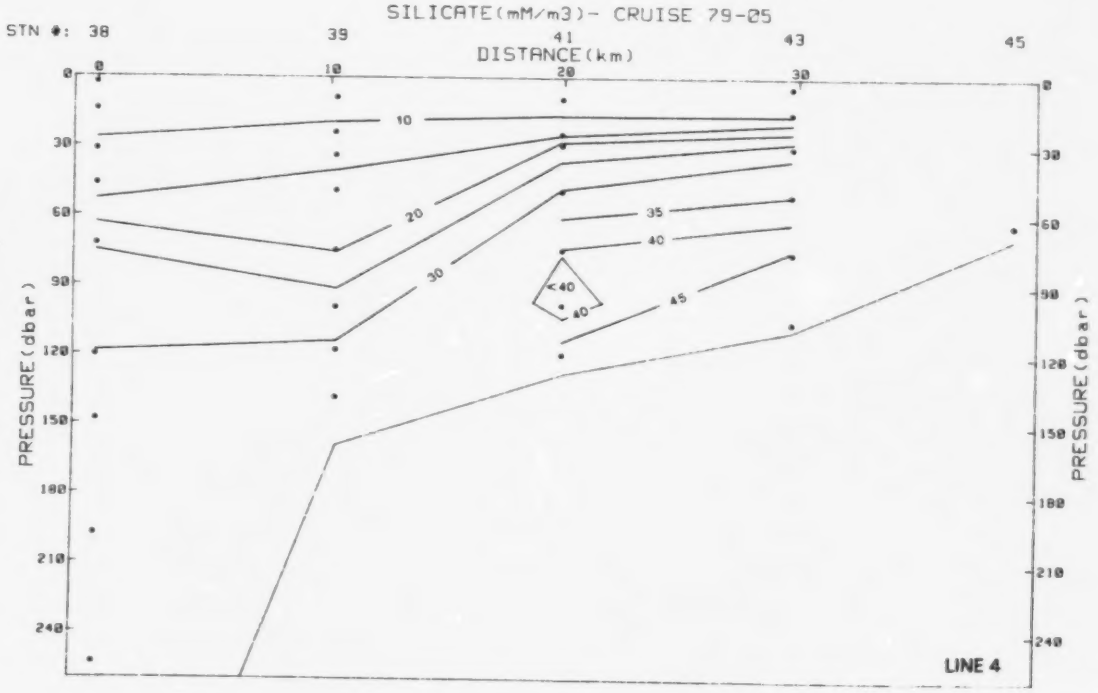

PHOSPHATE(mM/m3)- CRUISE 79-05
STN #: 37 36 35 33 31 29 27 25 24
DISTANCE(km)
0 10 20 30 40 50
0.5
1.0
1.5
2.0
2.5
3.0
25
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
LINE 3

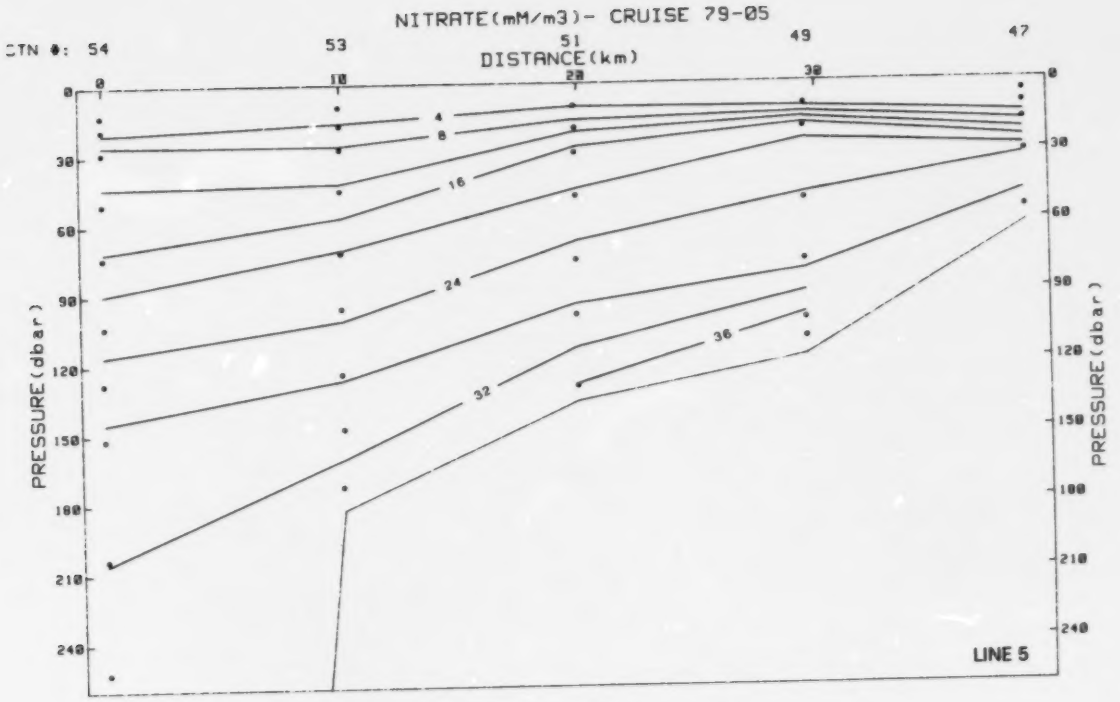

SILICATE(mM/m3)- CRUISE 79-05
STN #: 37 36 35 33 31 29 27 25 24
DISTANCE(km)
0 10 20 30 40 50
10
20
30
40
50
PRESSURE(dbar)
0 30 60 90 120 150 180 210 240
LINE 3

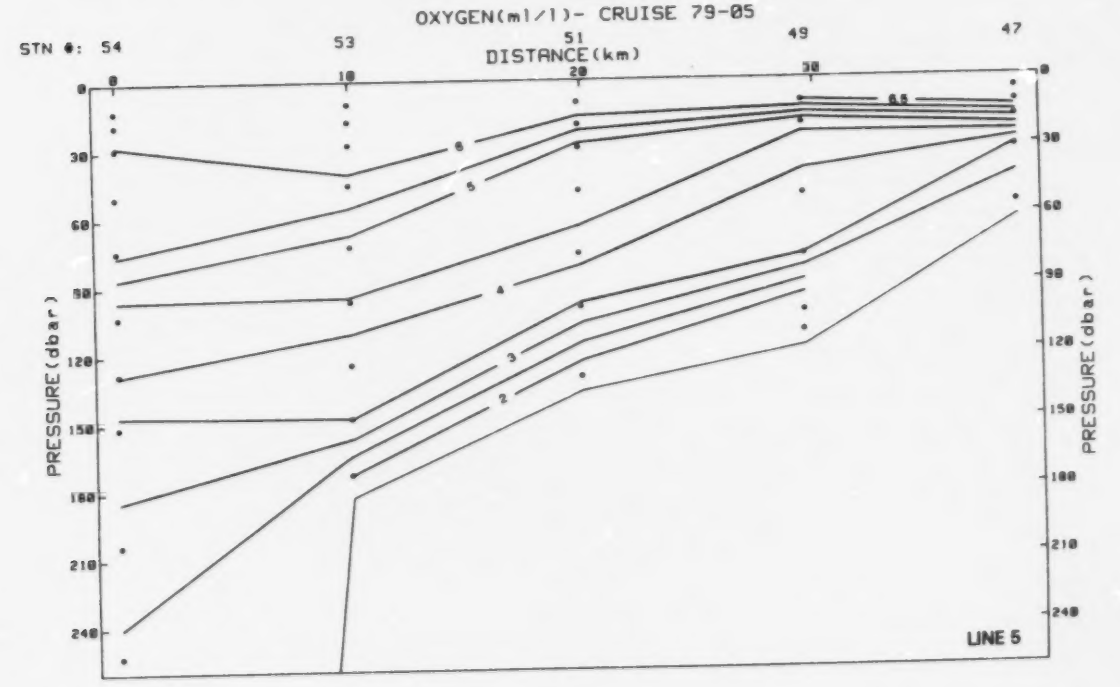

NITRATE(mM/m3)- CRUISE 79-05
STN #: 38
39
41
43
45
DISTANCE(km)
PRESSURE(dbar)
4
8
16
24
32
LINE 4

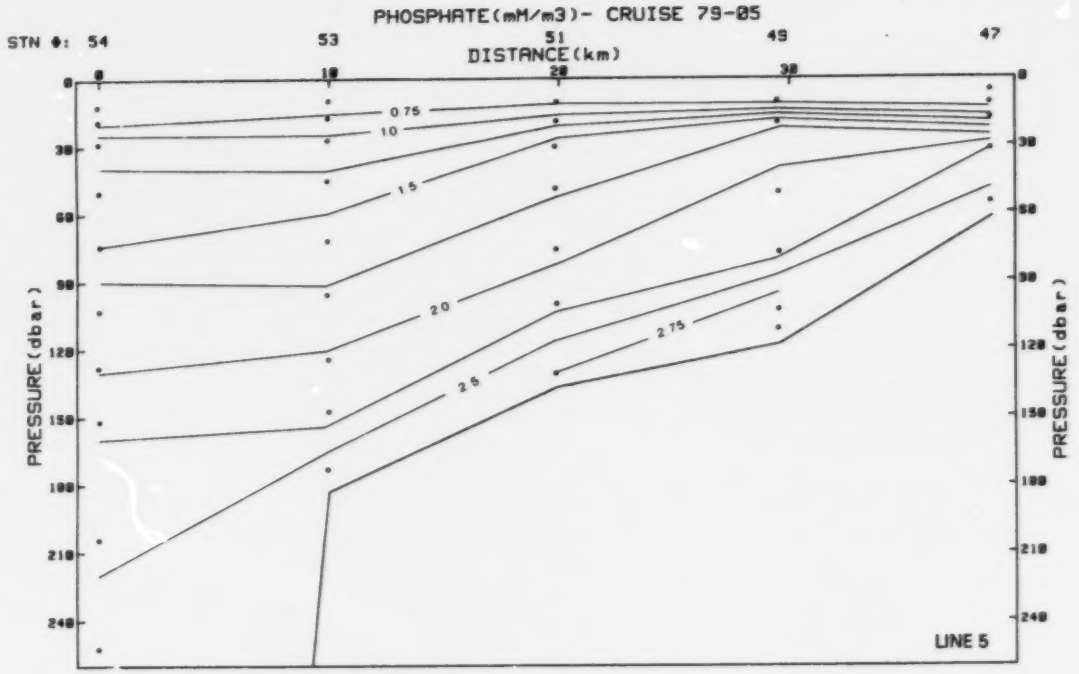

OXYGEN(ml/l)- CRUISE 79-05
STN #: 38
39
41
43
45
DISTANCE(km)
PRESSURE(dbar)
6
5
4
3
2
1.5
LINE 4

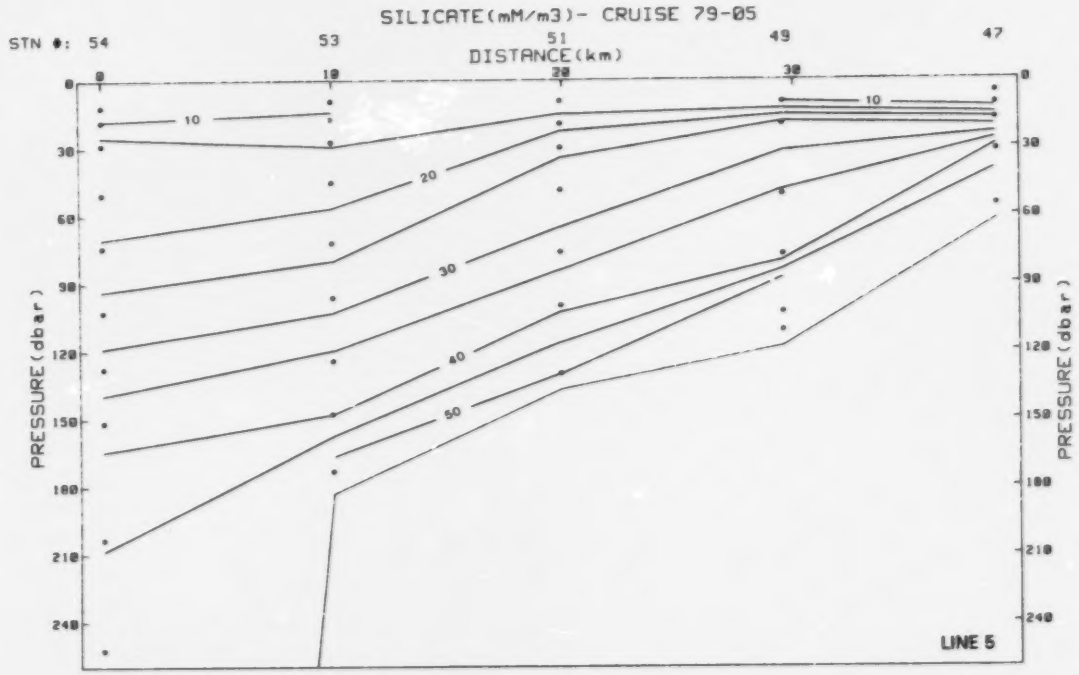

PHOSPHATE(mM/m3)- CRUISE 79-05
STN #: 38
39
41
43
45
DISTANCE(km)
0
10
20
30
0.5
1.0
1.5
2.0
2.5
2.75
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 4

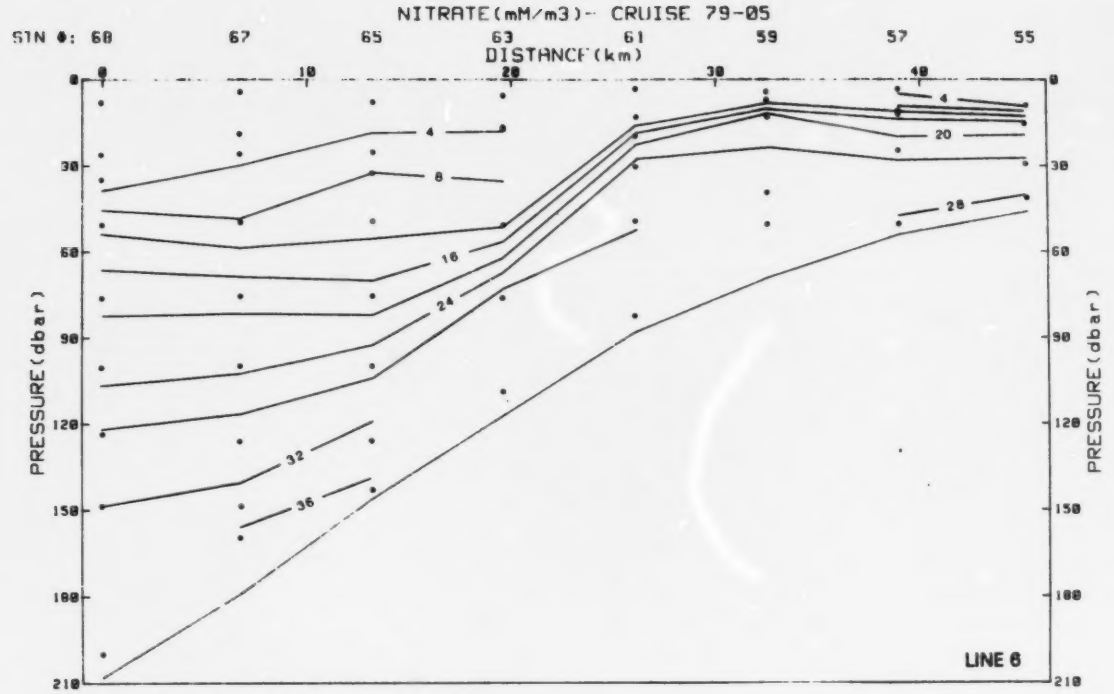

SILICATE(mM/m3)- CRUISE 79-05
STN #: 38
39
41
43
45
DISTANCE(km)
0
10
20
30
10
20
30
35
40
45
<40
40
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 4

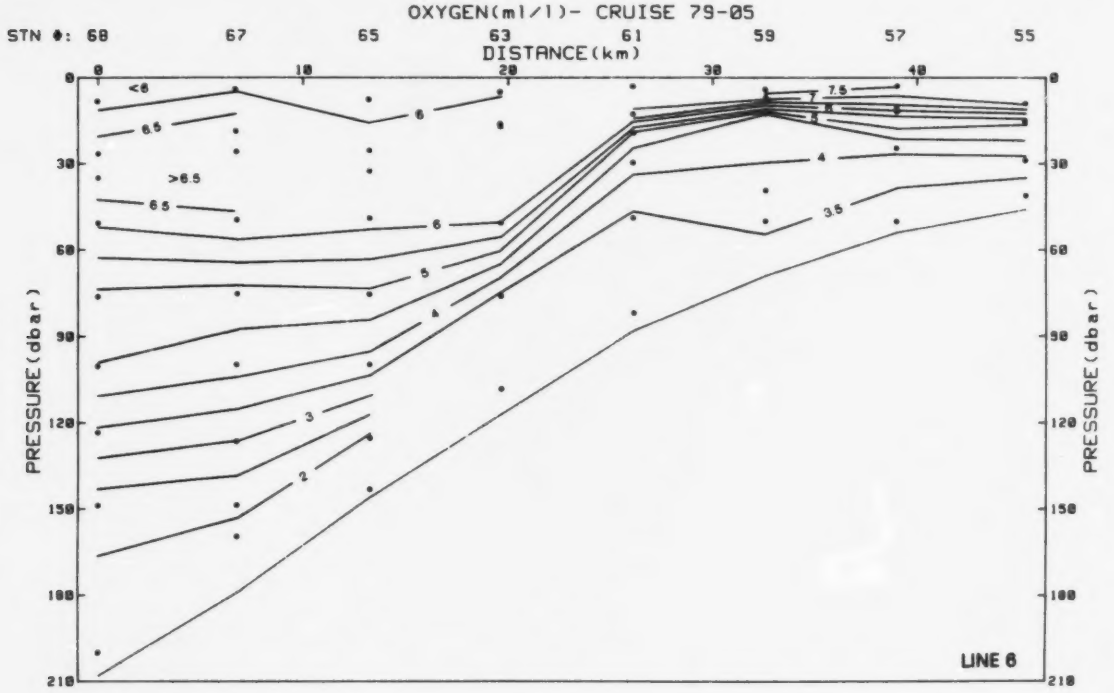

NITRATE(mM/m3)- CRUISE 79-05
STN #: 54
53
51
49
47
DISTANCE(km)
0
10
20
30
4
8
16
24
32
36
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 5

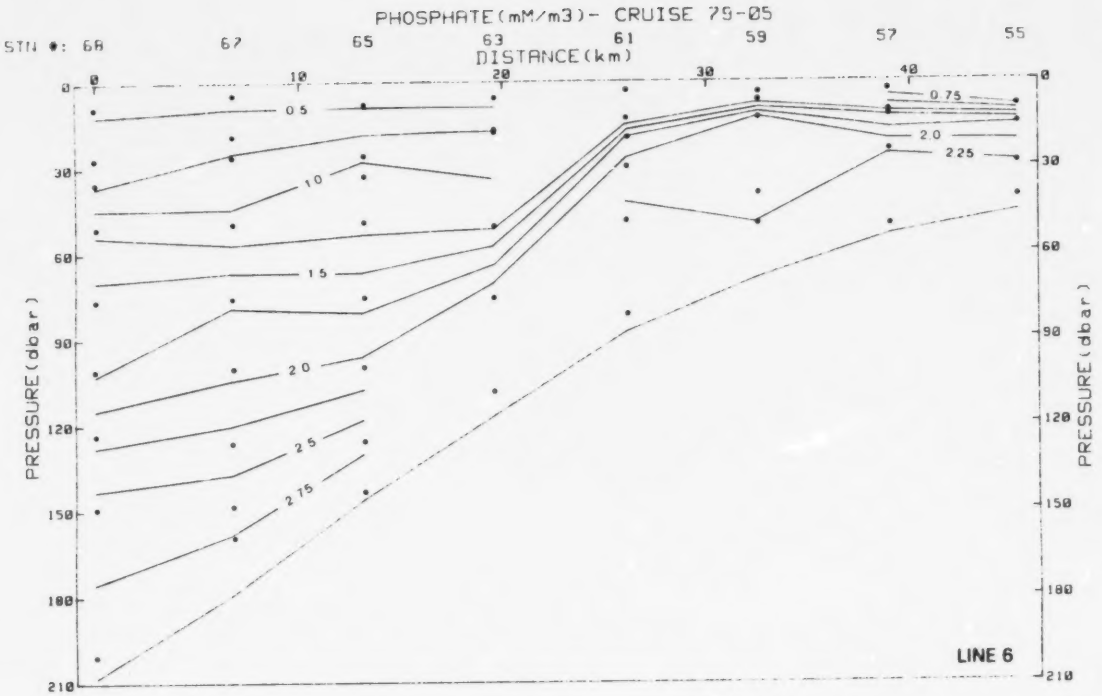

OXYGEN(ml/l)- CRUISE 79-05
STN #: 54
53
51
49
47
DISTANCE(km)
0
10
20
30
6
5
4
3
2
0.5
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 5

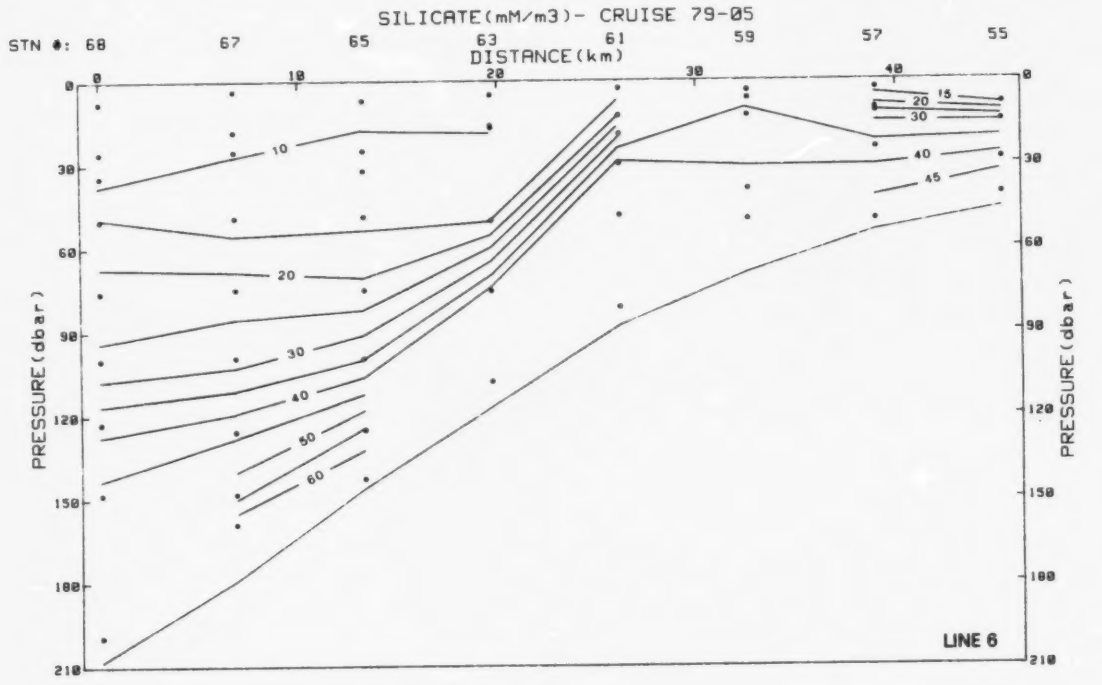

PHOSPHATE(mM/m3)- CRUISE 79-05
STN #: 54
53
51
49
47
DISTANCE(km)
0
10
20
30
0.75
1.0
1.5
2.0
2.5
2.75
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 5


SILICATE(mM/m3)- CRUISE 79-05
STN #: 54
53
51
49
47
DISTANCE(km)
0
10
20
30
10
20
30
40
50
PRESSURE(dbar)
0
30
60
90
120
150
180
210
240
LINE 5


NITRATE(mM/m3)- CRUISE 79-05
STN #: 68 67 65 63 61 59 57 55
DISTANCE(km)
0 10 20 30 40
PRESSURE(dbar)
0 30 60 90 120 150 180 210
4
8
16
24
32
36
4
20
28
LINE 6


OXYGEN(ml/l)- CRUISE 79-05
STN #: 68 67 65 63 61 59 57 55
DISTANCE(km)
0 10 20 30 40
PRESSURE(dbar)
0 30 60 90 120 150 180 210
<6
6.5
>6.5
6.5
6
6
5
4
3
2
7.5
7
6.5
6
4
3.5
LINE 6


PHOSPHATE(mM/m3)- CRUISE 79-05
STN #: 68 67 65 63 61 59 57 55
DISTANCE(km)
0 10 20 30 40
0.5
1.0
1.5
2.0
2.5
2.75
0.75
2.0
2.25
PRESSURE(dbar)
0 30 60 90 120 150 180 210
LINE 6


SILICATE(mM/m3)- CRUISE 79-05
STN #: 68 67 65 63 61 59 57 55
DISTANCE(km)
0 10 20 30 40
10
20
30
40
50
60
15
20
30
40
45
PRESSURE(dbar)
0 30 60 90 120 150 180 210
LINE 6

ZOOPLANKTON HAUL RESULTS - CRUISE 79-L2 STANDARD LIST - STATIONS 2 TO 9 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	2	3	4	5	6	7	8	9
AMPHIPODS*								
UNIDENTIFIED JUVENILES	44.7	256.2	.0	6.6	14.4	.0	.0	531.1
PARATHEMISTO SP.	14.9	.0	.0	.0	.0	35.9	14.2	22.2
CHAETOGNATHS*								
UNIDENTIFIED JUVENILES	.0	392.7	279.3	.0	101.0	491.9	64.0	620.1
SAGITTA ELEGANS	1530.4	7.4	89.4	552.5	569.5	520.6	71.1	29.6
EUKROHNIA HAMATA	539.8	7.4	.0	60.4	43.3	35.9	49.8	614.0
CTENOPHORES*								
PLEUROBRACHIA SP.	22.3	22.3	122.9	103.6	50.5	193.9	64.0	.0
EGGS LARVA*								
UNIDENTIFIED EGGS.	134145.3	152988.8	60687.1	84656.1	83104.4	.0	.0	1044.5
COPEPOD NAUPLII	10201.2	4514.5	4440.2	4575.5	22785.3	.0	.0	.0
BARNACLE NAUPLII	10711.2	4012.8	1480.2	.0	6257.4	.0	.0	523.7
EUPHAUSID LARVA	75488.6	39385.5	12581.0	9151.1	16976.7	2459.7	92.5	2796.1
DECAPOD LARVA	856.5	362.5	11.2	138.1	108.2	100.6	49.8	22.2
EUPHAUSIDS*								
JUVENILES	149.0	.0	11.2	1389.9	1196.9	2739.9	56.9	.0
EUPHAUSIA PACIFICA	134.1	.0	.0	17.3	14.4	.0	7.1	.0
THYSANOESSA SPINIFERA	7.4	.0	.0	86.3	21.6	3332.4	.0	.0
LARVACEANS*								
LARVACEANS	8347.1	2766.5	4484.9	2288.2	6711.7	2039.5	.0	.0
MEDUSAE*								
PHIALIDIUM SP.	61.9	7.4	.0	103.6	93.7	107.7	.0	.0
AEGANTHA SP.	14.9	.0	.0	17.3	.0	.0	.0	22.2
PROBOSCIDACTYLA SP.	.0	.0	11.2	.0	7.2	7.2	.0	.0
OSTRACODS*								
CONCHOECIA SP.	.0	.0	.0	.0	.0	.0	.0	1608.0
SIPHONOPHORES*								
NECTOPHORES BRACTS	22.3	.0	.0	.0	.0	179.6	.0	44.4
COPEPODS*								
ACARTIA CLAUSII S&F	1020.1	.0	.0	.0	227.1	.0	.0	.0
ACARTIA LONGIREMIS <=S3/4	2550.3	7776.5	1480.4	2288.2	4543.0	2459.7	.0	.0
ACARTIA LONGIREMIS <=S4/5	22442.6	16804.5	2220.1	18302.2	9313.1	3556.2	.0	523.7
ACARTIA LONGIREMIS S&M	3570.4	2257.5	220.2	13726.6	6587.3	4976.6	.0	.0
ACARTIA LONGIREMIS S&F	3570.4	6016.8	740.2	2288.1	4088.2	1480.9	926.8	523.7
CALANUS MARSHALLAE S3	510.0	400.6	3138.5	2687.9	1228.2	3458.0	170.8	153.0
CALANUS MARSHALLAE S4	510.0	523.9	1123.5	2034.0	1004.9	9632.1	284.6	428.4
CALANUS MARSHALLAE S5	5610.6	215.7	135.3	1525.5	6252.0	12088.6	1110.3	153.0
CALANUS MARSHALLAE S6M	3060.3	30.8	33.5	581.0	3126.6	1005.2	427.0	.0
CALANUS MARSHALLAE S6F	18872.1	970.4	55.9	1452.9	2233.1	21.5	341.6	30.6
CALANUS PACIFICUS <=S5	.0	.0	.0	.0	.0	.0	.0	44.4
CALANUS PACIFICUS S6M	.0	.0	.0	.0	.0	.0	28.5	7.4
CALANUS SP. S1/2	1530.1	1505.0	4440.2	13722.3	3127.6	4919.5	.0	.0
CALANUS TENUICORNIS <=S4	.0	.0	.0	.0	.0	.0	926.8	186.7

ZOOPLANKTON HAUL RESULTS - CRUISE 79-03 STANDARD LIST - STATIONS 2 TO 9

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	2	3	4	5	6	7	8	9
CALANUS TENUICORNIS S5	.0	.0	.0	.0	.0	.0	926.8	512.7
CALANUS TENUICORNIS S6M	.0	.0	.0	.0	.0	.0	.0	139.3
CALANUS TENUICORNIS S6F	510.0	.0	.0	.0	.0	.0	926.8	399.9
CENTROPAGES ABDOMINALIS <=S4	1530.1	2507.8	.0	.0	2234.2	.0	.0	.0
CENTROPAGES ABDOMINALIS S5	1530.1	752.5	.0	.0	.0	.0	.0	.0
CENTROPAGES ABDOMINALIS S6M	539.8	250.8	.0	.0	.0	.0	.0	.0
CENTROPAGES ABDOMINALIS S6F	59.6	774.9	.0	571.9	7.2	.0	.0	1287.4
ELCALANUS BUNGI S1/2	.0	.0	.0	.0	.0	14.4	.0	22.2
ELCALANUS BUNGI S3	7.4	.0	.0	8.6	.0	114.9	14.2	14.8
ELCALANUS BUNGI S4	22.3	.0	.0	51.8	7.2	280.1	21.3	14.8
EUCALANUS BUNGI S5M	7.4	.0	.0	51.8	7.2	14.4	.0	37.0
EUCALANUS BUNGI S5F	44.7	14.9	.0	51.8	21.6	71.8	7.1	37.0
EUCALANUS BUNGI S6M	14.9	.0	.0	.0	.0	.0	.0	.0
EUCALANUS BUNGI S6F	238.3	52.1	33.5	25.9	165.9	43.1	56.9	37.0
EUCHAETA JAPONICA S1/2	.0	.0	.0	.0	.0	.0	.0	186.7
EUCHAETA JAPONICA S3	14.9	.0	.0	.0	.0	.0	.0	106.6
EUCHAETA JAPONICA S4	.0	.0	.0	.0	.0	.0	.0	44.4
EUCHAETA JAPONICA S5M	.0	.0	.0	.0	14.4	7.2	.0	29.6
EUCHAETA JAPONICA S5F	7.4	.0	.0	.0	.0	.0	.0	37.0
EUCHAETA JAPONICA S6F	7.4	.0	.0	.0	.0	.0	.0	.0
METRIDIA SP. <=S3	2550.3	.0	.0	.0	893.5	5904.2	7416.2	6805.9
METRIDIA SP. S4	2550.3	.0	.0	.0	446.8	5915.0	3707.5	2618.6
METRIDIA PACIFICA S5M	1574.8	60.6	.0	.0	446.8	506.4	926.8	515.0
METRIDIA PACIFICA S5F	1154.2	60.6	.0	.0	.0	499.1	.0	257.5
METRIDIA PACIFICA S6M	81.9	.0	.0	.0	.0	.0	.0	.0
METRIDIA PACIFICA S6F	66.8	.0	11.2	.0	468.4	14.4	7.1	2317.4
NEOCALANUS CRISTATUS S2	.0	.0	.0	.0	.0	.0	28.5	.0
NEOCALANUS CRISTATUS S3	.0	.0	.0	.0	.0	14.4	462.5	86.7
NEOCALANUS CRISTATUS S4	67.0	.0	.0	17.3	7.2	7.2	106.7	66.6
NEOCALANUS CRISTATUS S5	200.5	.0	.0	.0	.0	93.4	42.7	384.6
NEOCALANUS PLUMCHRUS S2	.0	.0	.0	.0	.0	.0	85.4	.0
NEOCALANUS PLUMCHRUS S3	.0	.0	.0	.0	.0	.0	35.6	.0
NEOCALANUS PLUMCHRUS S4	.0	.0	.0	.0	.0	21.5	398.4	59.2
NEOCALANUS PLUMCHRUS S5	283.0	37.3	11.2	181.3	299.2	549.5	213.4	392.0
CITHONA HELGOLANDICA	20912.4	3260.3	8139.7	32033.1	16084.4	43290.5	64883.4	60226.6
CITHONA SPINIROSTRIS	510.0	.0	1480.4	.0	.0	1476.1	.0	4713.1
PSEUDOCALANUS SP. <=S3	33153.8	15547.5	19983.2	105250.4	12509.5	28039.7	4634.8	2095.6
PSEUDOCALANUS SP. S4	17852.0	5016.2	42927.4	130415.8	16084.4	24597.4	32444.4	41373.2
PSEUDOCALANUS SP. S5M	9691.1	2507.8	25162.0	73217.3	5808.5	34529.8	26879.6	34561.6
PSEUDOCALANUS SP. S5F	7140.8	752.4	22201.1	66354.0	2234.2	34924.4	47276.7	23041.2
PSEUDOCALANUS SP. S6M	7650.8	2507.8	11100.6	32032.7	8042.2	21645.3	8344.5	4713.1
PSEUDOCALANUS SP. S6F	14791.7	8279.3	48166.1	125844.6	19659.3	54111.0	30593.0	54463.5
SCOLECITHRICELLA MINOR <=S4	.0	.0	.0	.0	.0	491.5	926.8	523.7
SCOLECITHRICELLA MINOR S5	7.4	.0	.0	.0	.0	983.7	1854.0	.0
SCOLECITHRICELLA MINOR S6M	.0	.0	.0	.0	.0	.0	.0	523.7
SCOLECITHRICELLA MINOR S6F	510.0	258.2	.0	.0	.0	21.5	926.8	257.5

ZOOPLANKTON PAUL RESULTS - CRUISE 79-L3 VARIANTS LIST - STATIONS 2 TO 9

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	2	3	4	5	6	7	8	9
AEGINA SP.	.0	.0	.0	.0	.0	.0	.0	.0
AETIDEUS ARMATUS S6F	7.4	.0	.0	.0	.0	.0	.0	99.2
BARNACLE CYPRIDS	.0	250.8	.0	.0	.0	7.2	.0	.0
BIVALVE LARVA	.0	.0	11.2	.0	.0	.0	.0	.0
BRACHIURUS SP. S5	7.4	.0	.0	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6M	.0	.0	11.2	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6F	.0	.0	.0	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS <=S5	.0	250.8	.0	.0	.0	.0	.0	.0
CLAUSOCALANUS SP. S6F	.0	.0	.0	.0	446.8	.0	1854.0	3665.8
CLAUSOCALANUS SP. S5	.0	.0	.0	.0	.0	.0	1854.0	2065.0
CLAUSOCALANUS SP. <=S4	.0	.0	.0	.0	.0	.0	1854.0	.0
CYMBULIDAE	.0	.0	740.1	.0	.0	7.2	.0	.0
CYPHONAUTES LARVA	.0	250.8	.0	.0	.0	.0	.0	.0
ECHINOPLUTEUS LARVAE	.0	250.8	.0	.0	.0	.0	926.8	.0
EPILABIDOCERA AMPHITRITE <=S4	.0	250.8	.0	.0	.0	.0	.0	.0
EUCHAETA SP.	.0	.0	.0	.0	.0	.0	7.1	.0
EUCHIRELLA SP. S6F	.0	.0	.0	.0	7.2	.0	7.1	133.1
EUCHIRELLA SP. S6M	.0	.0	.0	.0	.0	.0	.0	7.4
EUCHIRELLA SP. S5	.0	.0	.0	.0	.0	.0	.0	7.4
EUCHIRELLA SP. <=S4	.0	.0	.0	.0	.0	.0	.0	7.4
FISH LARVAE	22.3	258.2	.0	.0	.0	7.2	.0	7.4
HETERORHABDUS SP. S6F	.0	.0	.0	.0	.0	.0	7.1	14.8
HETERORHABDUS SP. S6M	.0	.0	.0	.0	.0	.0	.0	14.8
HETERORHABDUS SP. S5	.0	.0	.0	.0	.0	.0	.0	22.2
HYPERIA SP.	.0	.0	.0	8.6	.0	.0	.0	.0
LUCICUTIA SP. S6F	.0	.0	.0	.0	.0	.0	.0	14.8
MICROCALANUS SP. S6F	510.0	.0	.0	.0	.0	.0	.0	.0
OITHONA SP.	510.0	.0	.0	.0	.0	.0	.0	523.7
PODON SP.	510.0	250.8	.0	.0	.0	.0	.0	.0
POLYCHAETE LARVAE	2047.7	.0	740.1	.0	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS S6F	.0	.0	.0	.0	.0	.0	.0	22.2
RACOVITZANUS ANTARCTICUS S5	.0	.0	.0	.0	.0	.0	.0	29.6
SAGITTA SCRIPPSAE	.0	.0	.0	.0	.0	.0	14.2	44.4
SALP	.0	.0	.0	.0	.0	7.2	.0	14.8
SARSIA SP.	7.4	.0	.0	.0	.0	.0	.0	.0
SIPHONOPHORE PLANULA	.0	.0	.0	.0	.0	.0	.0	7.4
SIPHONOPHORE PNEUMATOPHORE	.0	.0	.0	.0	.0	14.4	.0	.0
TOMOPTERIS SEPTENTRIONALIS	.0	.0	.0	.0	.0	.0	7.1	538.5
UNIDENTIFIED COPEPODITES	3067.8	.0	.0	.0	.0	.0	.0	.0
UNIDENTIFIED MEDUSAE	.0	7.4	11.2	.0	21.6	7.2	.0	.0
LIMACINA SP.	.0	250.8	2220.1	25191.4	2687.9	5629.5	291.7	1055.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-03 STANDARD LIST - STATIONS 10 TO 17

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	10	11	12	13	14	15	16	17
AMPHIPODS*								
UNIDENTIFIED JUVENILES	261.5	7.4	.0	281.5	.0	633.6	7.4	7.4
PARATHEMISTO SP.	14.9	29.8	.0	.0	.0	17.9	7.4	.0
CHAETOGNATHS*								
UNIDENTIFIED JUVENILES	.0	1108.9	148.9	116.2	22.3	.0	491.4	1346.4
SAGITTA ELEGANS	7.4	7.4	22.3	44.7	432.0	96.3	82.0	59.6
ELIKRONNIA HAMATA	156.4	59.6	29.7	.0	7.4	8.9	.0	.0
CTENOPHORES*								
PLEUROBRACHIA SP.	7.4	655.3	14.9	241.3	67.0	35.7	96.8	37.3
EGGS LARVA*								
UNIDENTIFIED EGGS.	986.4	.0	61932.2	44581.0	11033.5	13386.1	2169.3	2231.8
COPEPOD NAUPLII	.0	.0	1125P.4	13514.0	6681.6	4283.3	469.1	2678.2
BARNACLE NAUPLII	.0	.0	2815.2	281.5	477.2	535.4	117.3	.0
EUPHAUSID LARVA	739.5	1815.6	38505.2	14076.2	19083.8	17603.4	3459.2	29011.2
DECAPOD LARVA	141.5	930.2	1057.7	759.8	22.3	98.3	14.9	119.2
EUPHAUSIDS*								
JUVENILES	29.8	893.9	193.6	53.6	245.8	26.8	.0	.0
LARVACEANS*								
LARVACEANS	246.6	1644.1	14073.0	20268.2	16703.9	18741.6	7094.4	8480.7
MEDUSAE*								
PHIALIDIUM SP.	.0	178.8	59.6	107.3	96.8	169.8	37.3	104.3
AGLANTHA SP.	.0	.0	.0	.0	7.4	.0	.0	.0
PROBOSCIDACTYLA SP.	.0	7.4	.0	8.9	.0	.0	7.4	7.4
OSTRACODS*								
CONCHOECIA SP.	493.2	.0	.0	.0	.0	.0	.0	.0
SIPHONOPHORES*								
NECTOPHORES BRACTS	37.3	74.5	.0	.0	.0	.0	.0	.0
COPEPODS*								
ACARTIA CLAUSII S6F	.0	.0	938.2	281.5	.0	.0	58.7	.0
ACARTIA LONGIREMIS <=S3/4	.0	4539.7	3815.9	1196.1	1614.5	3948.8	1700.6	3403.4
ACARTIA LONGIREMIS <=S4/5	123.3	2723.5	6198.8	2181.0	6687.2	5791.1	4279.9	6804.5
ACARTIA LONGIREMIS S6M	246.6	1815.6	4292.8	1336.9	9687.2	2632.5	1524.6	4764.8
ACARTIA LONGIREMIS S6F	863.0	1815.6	3816.0	1969.8	3921.2	2369.0	1817.9	3403.4
CALANUS MARSHALLAE S3	15.1	1960.9	2605.8	1037.4	3460.3	1729.0	58.7	625.7
CALANUS MARSHALLAE S4	499.9	4844.1	3211.7	1323.5	2537.4	1417.9	37.3	357.7
CALANUS MARSHALLAE S5	242.4	1984.9	484.8	214.6	5074.9	1003.0	29.8	536.5
CALANUS MARSHALLAE S6M	90.9	113.4	60.6	214.6	3460.3	588.0	29.8	89.4
CALANUS MARSHALLAE S6F	45.5	.0	363.6	143.1	3229.6	242.0	22.3	29.8
CALANUS PACIFICUS <=S5	15.1	.0	.0	.0	.0	.0	.0	.0
CALANUS PACIFICUS S6M	15.1	.0	.0	.0	.0	.0	.0	.0
CALANUS PACIFICUS S6F	15.1	.0	.0	.0	.0	.0	.0	.0
CALANUS SP. S1/2	123.3	2723.5	9063.7	5348.9	10022.3	16597.2	3459.2	9374.3
CALANUS TENUICORNIS <=S4	123.2	.0	.0	.0	.0	.0	.0	.0
CALANUS TENUICORNIS S5	149.8	.0	.0	.0	477.2	.0	.0	.0

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	10	11	12	13	14	15	16	17
CALANUS TENUICORNIS S6M	58.2	.0	.0	.0	.0	.0	.0	.0
CALANUS TENUICORNIS S6F	91.4	56.1	14.9	.0	7.4	.0	.0	.0
CENTROPAGES ABDOMINALIS <=S4	.0	.0	954.0	563.1	1431.8	2677.2	879.3	1785.5
CENTROPAGES ABDOMINALIS S5	.0	.0	477.0	281.5	.0	1606.1	117.3	.0
CENTROPAGES ABDOMINALIS S6M	.0	.0	7.4	.0	.0	.0	.0	892.7
CENTROPAGES ABDOMINALIS S6F	.0	.0	536.6	17.9	14.9	17.9	7.4	7.4
EUCALANUS BUNGI S1/2	61.6	.0	.0	.0	.0	.0	.0	.0
EUCALANUS BUNGI S3	64.0	219.7	.0	8.9	.0	.0	7.4	.0
EUCALANUS BUNGI S4	.0	176.8	7.4	.0	.0	17.9	7.4	.0
EUCALANUS BUNGI S5M	14.9	67.0	7.4	17.9	22.3	.0	7.4	7.4
EUCALANUS BUNGI S5F	.0	59.6	.0	.0	7.4	53.6	14.9	.0
EUCALANUS BUNGI S6M	7.4	.0	14.9	.0	.0	.0	.0	.0
EUCALANUS BUNGI S6F	37.3	14.9	44.7	.0	59.6	26.8	.0	.0
EUCHAETA JAPONICA S1/2	30.8	.0	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S3	22.3	.0	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S6F	.0	.0	.0	.0	.0	.0	.0	14.9
METRIDIA SP. <=S3	2835.9	9078.2	.0	281.5	477.2	.0	58.7	446.4
METRIDIA SP. S4	1602.5	11804.5	2815.2	.0	.0	.0	175.9	.0
METRIDIA PACIFICA S5M	246.6	230.7	953.8	.0	.0	.0	.0	.0
METRIDIA PACIFICA S5F	.0	115.4	.0	.0	477.2	.0	.0	.0
METRIDIA PACIFICA S6M	.0	115.4	477.0	.0	477.2	.0	.0	.0
METRIDIA PACIFICA S6F	.0	.0	268.1	8.9	.0	.0	.0	.0
NEOCALANUS CRISTATUS S2	91.4	.0	.0	.0	.0	.0	.0	.0
NEOCALANUS CRISTATUS S3	128.6	290.3	.0	.0	.0	.0	.0	.0
NEOCALANUS CRISTATUS S4	61.9	137.7	7.4	.0	.0	.0	.0	.0
NEOCALANUS CRISTATUS S5	1839.5	7.4	.0	.0	.0	.0	.0	14.9
NEOCALANUS PLUMCHRUS S2	61.6	.0	.0	.0	.0	.0	.0	.0
NEOCALANUS PLUMCHRUS S3	14.9	7.4	.0	.0	.0	.0	.0	.0
NEOCALANUS PLUMCHRUS S4	134.1	487.5	.0	.0	22.3	8.9	.0	.0
NEOCALANUS PLUMCHRUS S5	908.6	22.3	7.4	8.9	37.3	.0	.0	14.9
OITHONA HELGOLANDICA	15042.3	30865.9	30966.1	6474.9	19083.8	14458.3	9145.3	8480.4
OITHONA SPINIROSTRIS	246.6	2723.6	1877.0	.0	.0	.0	117.3	892.7
PARACALANUS SP. S5	.0	.0	.0	.0	.0	.0	58.7	446.4
PSEUDOCALANUS SP. <=S3	1479.7	17251.4	16893.1	6754.2	9541.9	7494.4	1231.3	7586.3
PSEUDOCALANUS SP. S4	5547.7	57195.5	35657.1	19424.6	21474.9	26772.2	1289.9	20977.7
PSEUDOCALANUS SP. S5M	8629.9	35407.8	9382.0	8162.0	12882.7	14594.4	469.1	9821.2
PSEUDOCALANUS SP. S5F	4561.8	29960.9	8443.8	5910.6	12407.8	12850.0	645.0	11603.4
PSEUDOCALANUS SP. S6M	2342.6	23603.4	14073.0	4786.0	11927.4	16061.1	351.8	8033.5
PSEUDOCALANUS SP. S6F	9121.4	65363.1	37533.5	12106.1	30061.5	62641.5	996.6	18301.7
SCOLECITHRICELLA MINOR <=S4	739.5	907.9	.0	.0	.0	.0	.0	.0
SCOLECITHRICELLA MINOR S5	246.6	907.9	.0	.0	.0	.0	.0	.0
SCOLECITHRICELLA MINOR S6F	246.6	.0	.0	.0	.0	.0	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-03 VARIANTS LIST - STATIONS 10 TO 17

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	10	11	12	13	14	15	16	17
BARNACLE CYPRIDS	.0	.0	.0	281.5	.0	.0	.0	.0
BIVALVE LARVA	.0	.0	.0	.0	.0	.0	58.7	852.7
CALANUS MARSHALLAE/PACIFICUS S6F	123.3	.0	.0	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS <=S5	.0	.0	.0	.0	.0	34.6	.0	.0
CLAUSOCALANUS SP. S5	123.3	.0	.0	281.5	.0	.0	.0	.0
CLAUSOCALANUS SP. <=S4	.0	1815.8	.0	.0	.0	.0	.0	.0
CLIONE SP.	11.2	.0	.0	.0	.0	8.9	.0	.0
CYMBULIDAE	.0	.0	.0	.0	.0	.0	.0	7.4
ECHINOPLUTEUS LARVAE	.0	.0	1877.0	1689.4	.0	.0	351.8	.0
EPILABIDOCERA AMPHITRITE <=S4	.0	.0	.0	.0	.0	.0	124.7	.0
EPILABIDOCERA AMPHITRITE S6F	.0	7.4	.0	.0	.0	8.9	.0	.0
EUCHIRELLA SP. S6F	14.9	.0	.0	.0	.0	.0	.0	.0
FISH LARVAE	.0	907.8	14.9	.0	14.9	.0	.0	.0
HETERORHABDUS SP. S6M	7.4	.0	.0	.0	.0	.0	.0	.0
LUCICUTIA SP. S5	30.8	.0	.0	.0	.0	.0	.0	.0
LUCICUTIA SP. S6M	123.2	.0	.0	.0	.0	.0	.0	.0
LUCICUTIA SP. S6F	30.8	.0	.0	.0	.0	.0	.0	.0
NEMATOSCELIS SP.	14.9	.0	.0	.0	.0	.0	.0	.0
POLYCHAETE LARVAE	.0	1815.8	1877.0	844.6	1431.8	8.9	351.8	.0
SAGITTA SCHIPPSAE	22.3	.0	.0	.0	.0	.0	.0	.0
SALP	67.0	.0	.0	.0	7.4	17.9	.0	14.9
SIPHONOPHORE PLANULA	14.9	915.1	.0	.0	.0	.0	.0	.0
TOMOPTERIS SEPTENTRIONALIS	850.7	.0	.0	.0	.0	.0	.0	.0
UNIDENTIFIED AMPHIPOD	.0	.0	.0	.0	.0	.0	.0	14.9
UNIDENTIFIED MEDUSAE	.0	.0	.0	8.9	7.4	8.9	.0	29.8
LIMACINA SP.	5543.8	7279.3	946.0	844.7	2863.1	1829.5	1548.0	3779.3

ZOOPLANKTON HAUL RESULTS - CRUISE 79-03 STANDARD LIST - STATIONS 18 TO 28
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	18	19	20	21	22	24	26	28
AMPHIPODS*								
PARATHEMISTO SP.	529.4	55.9	33.5	56.1	32.4	8.0	.0	22.3
EUPRIMNE SP.	.0	.0	.0	.0	.0	8.0	.0	.0
CHAETOGNATHS*								
UNIDENTIFIED JUVENILES	.0	167.6	.0	.0	503.5	127.5	114.7	.0
SAGITTA ELEGANS	669.3	100.6	.0	22.4	32.4	629.7	712.5	193.6
ELAPHONIA HAMATA	.0	11.2	78.2	89.6	215.8	103.6	24.6	22.3
CTENOPHORES*								
PLEUROBRACHIA SP.	703.9	178.6	44.7	56.1	10.8	55.8	32.7	402.1
EGGS LARVA*								
UNIDENTIFIED EGGS.	.0	.0	.0	.0	.0	72321.9	128157.2	81198.8
COPEPOD NAUPLII	.0	.0	.0	.0	.0	9038.7	2373.5	14234.9
BARNACLE NAUPLII	.0	.0	.0	.0	.0	.0	4746.3	1054.5
EUPHAUSID LARVA	3088.9	340.3	191.2	521.3	10.8	4017.8	60280.7	6852.2
DECAPOD LARVA	43.6	11.2	22.3	.0	10.8	271.0	523.8	126.6
EUPHAUSIDS*								
JUVENILES	1154.9	737.4	134.1	.0	21.6	438.4	2145.8	59.6
EUPHAUSIA PACIFICA	.0	.0	.0	.0	.0	16.0	114.7	.0
THYSANOESSA SPINIFERA	21.8	33.5	.0	.0	.0	.0	49.1	7.4
LARVACEANS*								
LARVACEANS	7933.5	11.2	191.2	1390.3	363.3	5022.7	.0	6600.9
MEDUSAE*								
PHIALIDIUM SP.	72.7	11.2	11.2	.0	21.6	135.5	98.3	89.4
AGLANTHA SP.	7.3	.0	.0	.0	.0	.0	.0	.0
PROBOSCIDACTYLA SP.	7.3	11.2	.0	.0	10.8	.0	.0	.0
SIPHONOPHORES*								
NECTOPHORES BRACTS	14.6	.0	33.5	33.7	.0	.0	81.9	.0
COPEPODS*								
ACARTIA CLAUSII <=S5	.0	.0	.0	.0	.0	251.0	.0	.0
ACARTIA CLAUSII S6F	.0	.0	.0	.0	.0	251.0	.0	.0
ACARTIA LONGIREMIS <=S3/4	.0	.0	.0	347.5	726.6	4016.6	19935.5	527.3
ACARTIA LONGIREMIS <=S4/5	2733.9	1361.5	258.2	347.5	1089.8	4267.7	45838.5	6003.4
ACARTIA LONGIREMIS S6M	675.0	2382.7	258.2	173.8	726.6	6528.0	22309.0	4523.5
ACARTIA LONGIREMIS S6F	609.6	2040.6	663.0	.0	2543.0	4518.6	14239.6	698.6
CALANUS MARSHALLAE S3	2124.9	1730.2	.0	173.7	87.9	1148.4	1471.7	1129.2
CALANUS MARSHALLAE S4	784.1	7787.7	1460.1	2052.3	4741.7	1914.2	1717.4	275.5
CALANUS MARSHALLAE S5	161.7	6575.4	1165.7	1222.3	6236.0	4849.4	5519.7	1801.6
CALANUS MARSHALLAE S6M	94.5	1730.2	111.7	89.8	87.8	2042.1	1962.5	892.4
CALANUS MARSHALLAE S6F	1269.1	1038.0	111.7	166.9	263.4	4338.8	2821.3	705.9
CALANUS SP. S1/2	1029.4	4424.6	.0	347.5	.0	17127.0	6645.0	4218.0
CALANUS TENUICORNIS <=S4	.0	.0	.0	.0	87.8	.0	.0	.0
CALANUS TENUICORNIS S5	.0	.0	22.3	521.3	.0	.0	.0	.0
CALANUS TENUICORNIS S6M	.0	.0	.0	173.6	.0	.0	.0	.0
CALANUS TENUICORNIS S6F	.0	.0	33.5	.0	87.8	.0	.0	.0

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D. :	18	19	20	21	22	24	26	28
CENTROPAGES ABDOMINALIS <=S4	7.3	.0	.0	.0	.0	.0	1423.8	.0
CENTROPAGES ABDOMINALIS S5	.0	.0	.0	.0	.0	.0	949.3	527.3
CENTROPAGES ABDOMINALIS S6M	.0	.0	.0	.0	.0	.0	1424.0	.0
CENTROPAGES ABDOMINALIS S6F	21.8	.0	.0	.0	.0	1012.7	.0	542.2
ELCALANUS BUNGI S1/2	.0	11.2	.0	.0	87.8	.0	.0	.0
ELCALANUS BUNGI S3	58.2	55.9	.0	22.4	107.9	.0	.0	7.4
ELCALANUS BUNGI S4	116.3	156.4	.0	.0	75.5	6.0	8.2	.0
EUCALANUS BUNGI S5M	36.4	33.5	.0	.0	21.6	16.0	32.7	22.3
EUCALANUS BUNGI S5F	21.8	44.7	.0	11.2	43.2	31.9	57.3	22.3
ELCALANUS BUNGI S6M	.0	.0	.0	.0	.0	.0	8.2	.0
ELCALANUS BUNGI S6F	.0	.0	.0	11.2	64.7	34.9	213.0	22.3
EUCHAETA JAPONICA S3	.0	.0	11.2	11.2	.0	.0	.0	.0
EUCHAETA JAPONICA S4	.0	.0	.0	.0	.0	.0	8.2	.0
EUCHAETA JAPONICA S5F	.0	.0	.0	.0	.0	.0	8.2	.0
EUCHAETA JAPONICA S6F	.0	.0	.0	.0	.0	.0	8.2	.0
METRIDIA SP. <=S3	1029.4	12251.4	3250.6	3649.2	9807.1	1004.5	1898.6	1054.4
METRIDIA SP. S4	514.8	6469.3	4138.4	1216.4	2906.0	.0	949.3	527.3
METRIDIA PACIFICA S5M	514.8	680.4	4254.1	347.5	.0	1004.5	.0	1054.4
METRIDIA PACIFICA S5F	.0	340.3	1471.3	521.3	.0	.0	949.6	.0
METRIDIA PACIFICA S6M	522.1	.0	22.3	.0	.0	3013.5	.0	.0
METRIDIA PACIFICA S6F	58.2	.0	11.2	11.2	.0	1076.2	41.0	527.3
NEOCALANUS CRISTATUS S2	.0	.0	.0	.0	10.8	.0	.0	.0
NEOCALANUS CRISTATUS S3	.0	.0	111.7	89.8	86.3	.0	.0	.0
NEOCALANUS CRISTATUS S4	.0	11.2	55.9	22.4	53.9	.0	8.2	.0
NEOCALANUS CRISTATUS S5	.0	.0	22.3	415.2	21.6	.0	32.7	.0
NEOCALANUS PLUMCHRUS S2	.0	.0	.0	.0	363.3	.0	.0	.0
NEOCALANUS PLUMCHRUS S3	.0	.0	269.4	173.8	32.4	.0	.0	.0
NEOCALANUS PLUMCHRUS S4	14.6	.0	134.1	123.4	215.8	.0	8.2	14.9
NEOCALANUS PLUMCHRUS S5	7.3	22.3	111.7	213.2	32.4	175.3	98.3	22.3
OITHONA HELGOLANDICA	15654.3	41182.0	29883.5	35617.2	60304.8	24103.3	262.1	12654.5
OITHONA SPINIROSTRIS	.0	.0	191.2	1911.6	1816.3	3013.5	8.2	527.3
PARACALANUS SP. S5	.0	.0	.0	.0	363.3	1004.3	.0	.0
PSEUDOCALANUS SP. <=S3	11325.0	13614.5	1721.0	1908.2	7994.6	20092.1	18040.5	14234.9
PSEUDOCALANUS SP. S4	24198.5	15994.4	8031.1	4170.5	11625.1	32143.7	26578.6	27420.0
PSEUDOCALANUS SP. S5M	19045.8	6469.3	6311.8	6776.7	10896.8	27122.2	6173.2	25309.0
PSEUDOCALANUS SP. S5F	17502.7	7826.8	4589.2	2954.1	8356.0	30135.1	8071.3	20037.2
PSEUDOCALANUS SP. S6M	9781.9	10212.3	3632.9	2606.2	2543.0	22100.7	8543.6	9488.1
PSEUDOCALANUS SP. S6F	51995.6	21782.1	7456.9	7995.4	9807.1	67300.3	24680.6	36908.0
SCOLECITHRICELLA MINOR <=S4	.0	.0	382.4	173.8	363.3	.0	.0	.0
SCOLECITHRICELLA MINOR S5	.0	.0	569.8	.0	.0	.0	949.0	527.3
SCOLECITHRICELLA MINOR S6M	.0	.0	11.2	.0	.0	.0	.0	.0
SCOLECITHRICELLA MINOR S6F	.0	.0	67.0	347.5	363.3	1004.3	949.6	.0

ZOOPLANKTON PAUL MESULTS - CRUISE 79-C? VARIANTS LIST - STATIONS 18 TO 28 PAGE 1

(VALUES ARE NUMBERS OF ORGANISMS/SQ. METER)

STATION I.D.	18	19	20	21	22	24	26	28
BARNACLE CYPRIDS	.0	.0	.0	.0	769.8	2009.2	474.8	.0
BIVALVE LARVA	.0	680.4	.0	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS C=S5	.0	.0	.0	86.9	.0	.0	.0	.0
CLAUSOCALANUS SP. S6F	.0	340.3	1147.3	347.5	363.3	.0	.0	.0
CLAUSOCALANUS SP. S5	.0	340.3	.0	347.5	.0	.0	.0	.0
CLAUSOCALANUS SP. C=S4	.0	.0	.0	347.5	.0	.0	.0	.0
CLIONE SP.	.0	.0	.0	11.2	.0	.0	.0	.0
CORYCAEUS SP.	.0	.0	191.2	.0	.0	.0	.0	.0
CRYPTONISCID	.0	.0	191.2	.0	.0	.0	.0	.0
CYMBULIDAE	.0	.0	.0	11.2	.0	.0	.0	.0
CYPHONAUTES LARVA	.0	.0	.0	173.8	.0	.0	949.6	.0
ECHINOPLUTEUS LARVAE	522.1	.0	.0	173.8	.0	.0	.0	.0
EPILABIDOCERA SP. C=S4	.0	.0	.0	.0	.0	.0	474.6	.0
EPILABIDOCERA AMPHITRITE S6M	.0	.0	.0	.0	.0	.0	8.2	.0
EPILABIDOCERA AMPHITRITE S5	.0	.0	.0	.0	.0	8.0	.0	.0
EUCHIRELLA SP. S6F	.0	.0	.0	11.2	.0	.0	.0	.0
FISH LARVAE	.0	33.5	.0	.0	.0	.0	8.2	.0
GAETANUS SP. C=S4	.0	.0	.0	.0	363.3	.0	.0	.0
GAIDIUS VARIABLIS S6F	.0	.0	.0	.0	.0	.0	8.2	.0
LUCICUTIA SP. C=S4	.0	.0	.0	868.8	.0	.0	.0	.0
LUCICUTIA SP. S5	.0	.0	.0	173.8	363.3	.0	.0	.0
LUCICUTIA SP. S6M	.0	.0	.0	347.5	.0	.0	.0	.0
LUCICUTIA SP. S6F	.0	.0	.0	173.8	.0	.0	.0	.0
MICROCALANUS SP. S5	.0	.0	.0	.0	.0	.0	474.6	.0
MICROCALANUS SP. S6F	.0	.0	.0	.0	.0	1004.5	474.6	.0
PERACLIS SP.	522.1	340.3	.0	.0	.0	.0	.0	.0
PEDON SP.	.0	.0	.0	.0	.0	.0	474.8	.0
POLYCHAETE LARVAE	2262.8	340.3	.0	.0	363.3	2009.2	1423.8	.0
RACOVITZANUS ANTARCTICUS S5	.0	.0	191.2	.0	.0	.0	.0	.0
SAGITTA SCRIPPSAE	.0	.0	.0	11.2	10.8	8.0	.0	.0
SALP	50.9	.0	.0	.0	.0	8.0	.0	7.4
SIPHONOPHORE PLANULA	14.6	.0	.0	11.2	.0	.0	.0	.0
SIPHONOPHORE PNEUMATOPHORE	.0	.0	.0	.0	.0	.0	8.2	.0
TOMOPTERIS SEPTENTRIONALIS	7.3	11.2	22.3	207.4	.0	.0	.0	.0
UNIDENTIFIED COPEPODITES	.0	.0	764.7	.0	.0	.0	.0	.0
UNIDENTIFIED MEDUSAE	14.6	340.3	.0	11.2	10.8	23.9	8.2	.0
LIMACINA SP.	17279.2	4199.4	1281.4	3968.5	4564.3	7036.1	1423.8	1396.7

ZOOPLANKTON HAUL RESULTS - CRUISE 79-03 STANDARD LIST - STATIONS 30 TO 48
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	30	34	38	44	47	48
AMPHIPODS*						
UNIDENTIFIED JUVENILES	.0	.0	.0	6.2	787.4	.0
PARATHEMISTO SP.	44.3	7.2	.0	12.5	79.9	.0
EUPRIMNO SP.	.0	.0	.0	.0	.0	14.0
CHAETOGNATHS*						
UNIDENTIFIED JUVENILES	.0	565.0	573.4	889.4	196.7	133.2
SAGITTA ELEGANS	94.2	296.2	603.2	249.6	1007.9	1465.2
EUKROHNIA HAMATA	.0	50.5	36.8	2067.2	209.0	399.6
CTENOPHORES*						
PLEUROBRACHIA SP.	77.6	28.9	58.9	43.7	6.1	49.1
EGGS LARVA*						
UNIDENTIFIED EGGS.	42370.8	130606.7	166859.8	31002.9	123638.3	143547.8
COPEPOD NAUPLII	20400.3	3827.2	.0	40103.0	16930.4	11104.8
BARNACLE NAUPLII	3161.2	11478.9	5470.8	11164.4	8664.2	35028.6
EUPHAUSID LARVA	25106.8	24875.4	14133.0	47957.9	19291.4	46995.7
DECAPOD LARVA	105.2	56.0	110.4	156.0	147.5	4896.2
EUPHAUSIDS*						
JUVENILES	670.2	621.3	603.2	99.8	18.4	105.2
EUPHAUSIA PACIFICA	.0	14.5	.0	.0	301.2	266.4
THYSANOESSA SPINIFERA	.0	.0	.0	.0	.0	21.0
LARVACEANS*						
LARVACEANS	23715.2	5742.1	.0	21495.6	5905.2	12813.7
MEDUSAE*						
PHIALIDIUM SP.	72.0	79.5	59.1	37.4	49.2	35.1
PROBOSCIDACTYLA SP.	11.1	.0	.0	.0	6.1	.0
OSTRACODS*						
CONCHOECIA SP.	.0	.0	.0	.0	787.4	7.0
SIPHONOPHORES*						
NECTOPHORES BRACTS	.0	.0	.0	6.2	49.2	7.0
COPEPODS*						
ACARTIA LONGIREMIS <=S3/4	2325.8	5834.2	6838.6	1653.4	3150.0	26484.4
ACARTIA LONGIREMIS <=S4/5	7909.2	10698.8	14586.1	3099.8	3937.3	30759.1
ACARTIA LONGIREMIS S6M	4046.0	5350.5	12764.9	3202.8	1968.9	11110.1
ACARTIA LONGIREMIS S6F	6343.2	4377.6	9117.0	1963.3	2756.3	14527.8
CALANUS MARSHALLAE S3	6181.2	1315.3	1367.5	3616.1	984.2	673.5
CALANUS MARSHALLAE S4	5059.6	1076.4	1481.2	1320.5	688.9	561.0
CALANUS MARSHALLAE S5	4203.8	4065.5	5469.1	1168.4	3247.3	2497.0
CALANUS MARSHALLAE S6M	5.5	1793.6	2165.0	457.2	2164.7	2258.8
CALANUS MARSHALLAE S6F	11.1	3945.8	2734.5	1168.4	4133.1	2595.3
CALANUS PACIFICUS <=S5	.0	243.2	.0	.0	.0	.0
CALANUS PACIFICUS S6M	5.5	.0	.0	.0	.0	.0
CALANUS PACIFICUS S6F	5.5	.0	.0	.0	.0	.0
CALANUS SP. S1/2	35491.8	9568.4	10485.7	14056.4	4331.6	3417.7
CALANUS TENUICORNIS <=S4	.0	.0	455.9	.0	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 74-03 STANDARD LIST - STATIONS 30 TO 48
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	: 30	34	38	44	47	48
CALANUS TENUICORNIS S6F	.0	.0	7.3	.0	98.4	654.4
CENTROPAGES ABDOMINALIS <=S4	771.4	478.4	455.9	1240.5	.0	.0
CENTROPAGES ABDOMINALIS S5	771.4	956.8	911.7	413.4	.0	654.4
CENTROPAGES ABDOMINALIS S6M	.0	478.4	.0	826.7	393.7	.0
CENTROPAGES ABDOMINALIS S6F	1576.4	.0	7.3	9.4	12.3	861.5
EUCALANUS BUNGI S3	11.1	.0	.0	6.2	.0	.0
EUCALANUS BUNGI S4	127.4	7.2	29.4	6.2	.0	77.1
EUCALANUS BUNGI S5M	49.8	14.5	.0	12.5	.0	28.0
EUCALANUS BUNGI S5F	44.3	28.9	22.1	6.2	.0	42.1
EUCALANUS BUNGI S6M	.0	.0	.0	.0	.0	7.0
EUCALANUS BUNGI S6F	144.0	43.3	95.6	99.8	141.4	119.2
EUCHAETA JAPONICA S3	.0	.0	.0	.0	393.7	.0
EUCHAETA JAPONICA S4	.0	.0	.0	.0	6.1	133.3
EUCHAETA JAPONICA S5M	.0	7.2	.0	.0	6.1	35.1
EUCHAETA JAPONICA S5F	.0	.0	.0	.0	12.3	21.0
EUCHAETA JAPONICA S6M	.0	.0	.0	.0	6.1	7.0
EUCHAETA JAPONICA S6F	.0	.0	.0	.0	.0	7.0
METRIDIA SP. <=S3	3091.8	1435.3	2279.8	4134.3	2362.6	2563.3
METRIDIA SP. S4	3857.8	478.4	455.9	1240.5	1968.9	.0
METRIDIA PACIFICA S5M	762.6	1435.5	455.9	413.4	786.8	1708.8
METRIDIA PACIFICA S5F	5.5	1435.5	911.8	.0	1181.0	1708.8
METRIDIA PACIFICA S6M	.0	478.4	911.8	413.4	1575.3	.0
METRIDIA PACIFICA S6F	5.5	1507.6	956.0	74.9	2380.9	5127.0
NEOCALANUS CRISTATUS S3	5.5	.0	7.3	.0	.0	.0
NEOCALANUS CRISTATUS S4	16.6	.0	29.4	.0	.0	7.0
NEOCALANUS CRISTATUS S5	16.6	28.9	7.3	.0	221.3	49.1
NEOCALANUS PLUMCHRUS S5	44.3	115.5	117.7	31.2	313.5	378.6
OITHONA HELGOLANDICA	41336.5	29182.0	23708.6	9923.9	19296.8	23072.0
OITHONA SPINIROSTRIS	11.1	956.7	.0	826.7	393.7	1708.8
PARALALANUS SP. S5	.0	478.4	.0	.0	.0	.0
PSEUDOCALANUS SP. <=S3	9417.1	6695.6	14591.6	16950.3	50006.0	44435.1
PSEUDOCALANUS SP. S4	29817.4	16744.3	24161.1	15709.8	31892.4	49561.6
PSEUDOCALANUS SP. S5M	26677.0	15308.8	13223.0	8683.4	21259.8	13670.7
PSEUDOCALANUS SP. S5F	43941.0	18179.8	12764.9	5373.9	12993.6	21363.1
PSEUDOCALANUS SP. S6M	43941.0	15308.8	7295.8	4547.7	9449.4	13670.7
PSEUDOCALANUS SP. S6F	130252.9	44014.1	27809.1	10335.9	18898.8	12818.9
SCOLECITHRICELLA MINOR S6F	.0	.0	455.9	419.7	.0	654.4

ZOOPLANKTON HAUL RESULTS - CRUISE 79-03 VARIANTS LIST - STATIONS 30 TO 48 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D. :	30	34	38	44	47	48
BARNACLE CYPRIDS	.0	.0	.0	.0	6.1	28.0
CALANUS MARSHALLAE/PACIFICUS S6F	.0	243.2	.0	.0	.0	.0
CANDACIA COLUMBIAE S6F	.0	.0	.0	.0	.0	7.0
CANDACIA COLUMBIAE S6M	.0	.0	.0	.0	6.1	7.0
CANDACIA COLUMBIAE S5	.0	.0	.0	.0	6.1	7.0
CEPHALOPOD	.0	.0	7.3	.0	.0	.0
CLAUSOCALANUS SP. S6F	1569.4	.0	911.7	.0	.0	.0
CLAUSOCALANUS SP. S5	1569.4	.0	455.9	.0	.0	.0
CLIONE SP.	22.1	.0	.0	.0	6.1	.0
CORYCAEUS SP.	.0	.0	.0	413.4	.0	.0
CYPHONAUTES LARVA	.0	.0	.0	413.4	.0	.0
ECHINOPLUTEUS LARVAE	.0	.0	.0	413.4	.0	.0
EPILABIDOCERA AMPHITRITE S6M	.0	.0	.0	.0	6.1	.0
EUCHIRELLA SP. S6F	.0	.0	.0	.0	6.1	14.0
EUCHIRELLA SP. S5	.0	.0	.0	.0	.0	7.0
EVADNE SP.	.0	.0	.0	.0	393.7	.0
FISH LARVAE	11.1	.0	.0	6.2	.0	.0
GAETANUS SP. S6F	.0	.0	.0	.0	.0	21.0
GAIDIUS VARIABLIS S6F	.0	.0	.0	.0	.0	7.0
GAIDIUS VARIABLIS S5	.0	.0	.0	.0	6.1	14.0
GAIDIUS VARIABLIS C=S4	.0	.0	.0	.0	.0	7.0
HETERORHABDUS SP. S6F	.0	.0	.0	.0	6.1	.0
HETERORHABDUS SP. S6M	.0	.0	.0	.0	.0	14.0
HETERORHABDUS SP. S5	.0	.0	.0	.0	.0	7.0
LUCICUTIA SP. S6F	.0	.0	.0	.0	98.4	.0
PLEUROMAMMA SCUTULLATA S5	.0	.0	.0	.0	6.1	.0
POLON SP.	.0	.0	.0	.0	.0	2563.3
POLYCHAETE LARVAE	2342.4	478.4	.0	.0	12.3	14.0
RACOVITZANUS ANTARCTICUS S6F	.0	243.2	.0	.0	.0	119.3
SAGITTA SCRIPPSAE	.0	.0	.0	6.2	.0	.0
SALP	11.1	.0	.0	.0	12.3	.0
SCAPHOCALANUS SP. S5	.0	.0	.0	.0	98.4	.0
TOMOPTERIS SEPTENTRIONALIS	.0	.0	.0	.0	30.7	21.0
TORTANUS DISCAUDATUS S5	.0	.0	.0	.0	.0	854.4
UNIDENTIFIED MEDUSAE	5.5	.0	.0	6.2	.0	7.0
LIMACINA SP.	4972.3	5277.4	918.9	419.7	1187.5	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 1 TO 8 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/S.. METER)

STATION I.D.	1	2	3	4	5	6	7	8
AMPHIPODS*								
UNIDENTIFIED JUVENILES	224.6	.0	.0	.0	.0	.0	.0	.0
PARATHEMISTO SP.	594.6	78.0	278.7	36.8	11.1	32.3	52.9	44.7
EUPRIMNO SP.	.0	6.1	.0	.0	.0	.0	.0	.0
CHAETOGNATHS*								
UNIDENTIFIED JUVENILES	224.6	92.1	.0	.0	178.3	555.8	287.5	402.0
SAGITTA ELEGANS	914.9	31.8	415.9	2091.1	1437.7	5923.1	921.2	.0
EUKROHNIA HAMATA	144.9	603.9	238.1	.0	11.1	73.1	.0	.0
CTENOPHORES*								
PLEUROBRACHIA SP.	.0	.0	.0	.0	.0	7.9	.0	.0
EGGS LARVA*								
UNIDENTIFIED EGGS.	9227.0	415.5	552.5	29862.6	.0	3335.3	.0	76341.4
COPEPOD NAUPLII	5027.4	623.3	1657.4	426.4	.0	1111.6	2586.8	2218.2
BARNACLE NAUPLII	20.7	.0	.0	.0	.0	.0	.0	184.8
EUPHAUSID LARVA	238.6	1284.7	300.8	487.7	.0	176.4	306.8	33.5
DECAPOD LARVA	82.8	76.4	49.2	61.3	.0	24.3	9.6	11.2
EUPHAUSIDS*								
JUVENILES	.0	.0	.0	.0	22.3	.0	.0	.0
EUPHAUSIA PACIFICA	.0	.0	.0	12.2	66.9	24.3	.0	.0
THYSANOESSA SPINIFERA	.0	12.9	.0	.0	111.4	.0	.0	.0
LARVACEANS*								
LARVACEANS	.0	.0	552.5	.0	.0	.0	287.5	11.2
MEDUSAE*								
PHIALIDIUM SP.	.0	25.7	.0	61.3	.0	24.3	.0	.0
AGLANTHA SP.	20.7	6.1	.0	.0	.0	.0	.0	.0
PROBOSCIDACTYLA SP.	6.7	6.1	.0	.0	11.1	7.9	.0	.0
OSTRACODS*								
CONCHOECIA SP.	245.3	2304.5	766.0	.0	.0	.0	.0	.0
SIPHONOPHORES*								
NECTOPHORES BRACTS	6.7	31.8	32.6	.0	.0	.0	.0	.0
COPEPODS*								
ACARTIA LONGIREMIS <=S3/4	2285.2	.0	1657.4	426.4	.0	365.3	1188.5	1512.5
ACARTIA LONGIREMIS <=S4/5	7140.8	13.9	6353.0	10665.1	4992.9	2100.3	1039.9	671.1
ACARTIA LONGIREMIS S6M	1764.6	24.6	3866.8	17491.1	14988.2	2283.0	1708.0	290.3
ACARTIA LONGIREMIS S								
CALANUS MARSHALLAE S3	238.6	207.6	308.8	3936.5	858.7	141.4	490.6	212.2
CALANUS MARSHALLAE S4	278.9	44.1	1337.5	2127.3	1248.8	375.2	226.6	78.2
CALANUS MARSHALLAE S5	924.2	1612.9	612.8	4234.9	2531.6	1071.5	188.9	.0
CALANUS MARSHALLAE S6M	434.2	252.5	32.6	1728.4	557.8	95.1	75.5	44.7
CALANUS MARSHALLAE S6F	829.5	1049.9	41.2	1351.6	5207.5	1763.3	1736.6	111.7
CALANUS PACIFICUS <=S5	.0	.0	.0	.0	.0	.0	222.8	.0
CALANUS PACIFICUS S6F	.0	.0	8.0	.0	.0	.0	.0	.0
CALANUS SP. S1/2	1829.3	415.6	1381.2	2609.5	1069.9	318.8	1461.3	184.6
CENTROPAGES ABDOMINALIS <=S4	.0	.0	1381.2	.0	.0	.0	.0	.0

(VALUES ARE NUMBER OF ORGANISMS/S.. METER)

STATION I.D.	1	2	3	4	5	6	7	8
CENTROPAGES ABDOMINALIS S5	.0	.0	276.2	25.1	.0	.0	.0	.0
CENTROPAGES ABDOMINALIS S6F	40.9	.2	8.0	25.1	.0	.0	.0	.0
EUCALANUS BUNCI S1/2	.0	.0	.0	426.4	.0	.0	.0	.0
EUCALANUS BUNCI S3	17.9	.3	8.0	426.4	.0	.0	.0	.0
EUCALANUS BUNCI S4	.0	.5	49.2	36.8	.0	.0	.0	.0
EUCALANUS BUNCI S5M	14.0	.6	16.6	24.5	.0	.0	.0	.0
EUCALANUS BUNCI S5F	20.7	1.3	6.1	24.5	.0	1.3	.0	.0
EUCALANUS BUNCI S6M	34.7	.0	6.1	12.2	.0	.0	.0	.0
EUCALANUS BUNCI S6F	68.6	10.9	410.4	147.0	22.3	12.0	.0	.0
EUCHAETA JAPONICA S1/2	.0	3.4	24.6	147.0	.0	.0	.0	.0
EUCHAETA JAPONICA S3	14.0	.3	81.8	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S4	.0	1.5	32.6	.0	.0	1.3	.0	.0
EUCHAETA JAPONICA S5M	6.7	.2	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S5F	6.7	.6	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S6M	.0	.3	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S6F	6.7	.1	.0	.0	.0	.0	.0	.0
METRIDIA SP. <=S3	.0	16.7	1105.0	.0	.0	.0	.0	.0
METRIDIA SP. S4	.0	31.1	1657.4	426.4	.0	.0	151.1	.0
METRIDIA PACIFICA S5M	13.5	18.4	308.8	1311.8	.0	2.7	151.1	.0
METRIDIA PACIFICA S5F	245.3	5.7	650.9	624.3	.0	44.9	78.9	.0
METRIDIA PACIFICA S6M	34.2	.1	8.0	438.7	.0	.0	37.8	.0
METRIDIA PACIFICA S6F	341.5	8.6	451.0	85.8	.0	.0	.0	.0
NEOCALANUS CRISTATUS S3	.0	.4	123.1	49.0	.0	1.3	.0	.0
NEOCALANUS CRISTATUS S4	.0	1.2	461.1	.0	.0	2.7	.0	.0
NEOCALANUS CRISTATUS S5	27.4	16.4	303.3	24.5	11.1	4.0	.0	.0
NEOCALANUS PLUMCHRUS S3	.0	6.1	.0	.0	.0	.0	.0	.0
NEOCALANUS PLUMCHRUS S4	.0	6.1	8.0	.0	.0	.0	.0	.0
NEOCALANUS PLUMCHRUS S5	34.2	2149.2	672.5	24.5	.0	46.2	.0	.0
OITHONA HELGOLANDICA	2052.4	13214.5	14363.4	15376.7	7794.7	5479.2	2748.0	3302.4
OITHONA SPINIROSTRIS	13.5	1259.2	3590.5	575.9	546.7	.0	287.5	33.5
PARACALANUS SP. S6M	.0	.0	.0	426.4	.0	.0	.0	.0
PSEUDOCALANUS SP. <=S3	45247.6	3531.8	12705.9	9385.2	5710.1	2630.9	28741.1	21072.4
PSEUDOCALANUS SP. S4	27879.6	5193.8	10772.8	22610.1	11955.1	6849.0	14945.5	12939.4
PSEUDOCALANUS SP. S5M	15539.6	4778.8	5248.0	11945.0	7137.2	3104.9	9771.9	4806.0
PSEUDOCALANUS SP. S5F	14625.7	3739.7	5800.5	699.1	4817.9	2630.9	5748.1	3142.2
PSEUDOCALANUS SP. S6M	3656.6	831.3	1105.0	4266.2	178.3	91.3	2011.9	1848.6
PSEUDOCALANUS SP. S6F	26508.8	4776.8	5524.8	25170.0	4639.1	3561.4	14945.5	2033.4
SCOLECITHRICELLA MINOR <=S4	.0	.0	1105.0	.0	.0	91.3	.0	.0
SCOLECITHRICELLA MINOR S5	.0	15.8	828.7	463.8	.0	.0	.0	.0
SCOLECITHRICELLA MINOR S6M	.0	3.6	.0	.0	.0	.0	.0	.0
SCOLECITHRICELLA MINOR S6F	.0	6.6	342.1	123.8	.0	.0	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-L4 VARIANTS LIST - STATIONS 1 TO 8 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	1	2	3	4	5	6	7	8
AEGISTHUS SP.	.0	.0	8.0	.0	.0	.0	.0	.0
AETIDEUS ARMATUS S6F	.0	.1	8.0	.0	.0	.0	.0	.0
AETIDEUS ARMATUS <=S4	.0	.3	.0	25.1	.0	.0	.0	.0
BARNACLE CYPRIDS	.0	.0	8.0	25.1	.0	48.7	297.1	.0
BIVALVE LARVA	.0	.0	2762.4	.0	.0	.0	.0	.0
BRADYIDIUS SP. <=S4	13.5	.0	.0	.0	.0	.0	.0	.0
CANDACIA COLUMBIAE S6F	.0	.1	.0	.0	.0	.0	.0	.0
CANDACIA COLUMBIAE S6M	.0	.1	.0	.0	.0	.0	.0	.0
CANDACIA COLUMBIAE <=S4	.0	3.3	.0	.0	.0	.0	.0	.0
CLAUSOCALANUS SP. S6F	.0	3.1	.0	12.2	.0	.0	.0	.0
CLAUSOCALANUS SP. S5	.0	.0	.0	12.2	.0	.0	.0	.0
CLAUSOCALANUS SP. <=S4	.0	.0	.0	426.4	.0	.0	.0	.0
CLIONE SP.	.0	12.9	.0	.0	.0	.0	.0	.0
CORYCAEUS SP.	40.9	.0	.0	.0	.0	.0	292.1	11.2
CRYPTONISCID	.0	.0	552.5	12.2	11.1	7.9	.0	11.2
CYMBULIDAE	.0	.0	.0	12.2	.0	16.4	.0	.0
ECHINOPLUTEUS LARVAE	.0	.0	.0	426.4	.0	.0	287.5	.0
EPILABIDOCERA SP. <=S4	26.9	.0	.0	.0	.0	.0	287.5	11.2
EPILABIDOCERA AMPHITRITE S6M	.0	.0	.0	24.5	.0	.0	.0	.0
FISH LARVAE	6.7	6.1	.0	24.5	.0	.0	4.6	.0
GAETANUS SP. S6F	14.0	.0	.0	.0	.0	.0	.0	.0
GAETANUS SP. S5	13.5	.0	.0	.0	.0	.0	.0	.0
GAETANUS SP. <=S4	.0	.1	.0	.0	.0	.0	.0	.0
GAIDIUS VARIABLIS <=S4	.0	.8	.0	.0	.0	.0	.0	.0
HETERORHABDUS TANNERI S5	.0	.2	16.6	.0	.0	.0	.0	.0
HETERORHABDUS TANNERI <=S4	.0	.2	8.0	.0	.0	.0	.0	.0
HYPERIA SP.	.0	.0	8.0	.0	.0	.0	.0	.0
LUCICUTIA SP. S5	.0	.0	552.5	.0	.0	.0	.0	.0
MICROCALANUS SP. S5	.0	.0	1381.2	.0	.0	.0	.0	.0
MICROCALANUS SP. S6F	456.9	6.2	276.2	.0	.0	.0	.0	.0
MICROCALANUS SP. S6M	.0	.0	90.4	.0	.0	.0	.0	.0
MYSID	.0	.0	284.2	6.1	.0	.0	.0	.0
NATANTIA	20.7	.0	8.0	.0	.0	.0	.0	.0
ONCAEA SP.	456.9	3.1	552.5	.0	.0	.0	.0	.0
PLEUROMAMMA SP.	13.5	.0	.0	.0	.0	.0	.0	.0
PLEUROMAMMA SCUTULLATA S6M	.0	.0	8.0	.0	.0	.0	.0	.0
POLYCHAETE LARVAE	238.6	.0	.0	.0	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS S6F	13.5	.3	90.4	.0	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS S5	.0	.2	284.2	6.1	11.1	.0	.0	.0
RACOVITZANUS ANTARCTICUS <=S4	.0	.3	8.0	.0	.0	.0	.0	.0
RADIOLARIA	.0	26.2	.0	.0	.0	.0	.0	.0
SAGITTA SCRIPPSAE	.0	.0	8.0	.0	.0	.0	.0	.0
SARSIA SP.	.0	.0	.0	.0	.0	.0	4.6	.0
SCAPHOCALANUS SP. S6F	.0	.0	8.0	.0	.0	.0	.0	.0

(VALUES ARE NUMBER OF ORGANISMS/CU. METER)

STATION I.D.		1	2	3	4	5	6	7	8
SCAPHOCALANUS SP.	SS	.0	.0	593.7	12.2	.0	.0	.0	.0
SIPHONOPHORE PHYSMATOPHORE		.0	.0	.0	426.4	.0	.0	.0	.0
SPINOCALANUS BREVICAUDATUS	S&F	.0	.1	.0	.0	.0	.0	.0	.0
SPINOCALANUS BREVICAUDATUS	SS	.0	.0	.0	12.2	.0	.0	.0	.0
TOMOPTERIS SEPTENTRIONALIS		.0	94.7	593.7	12.2	.0	.0	.0	.0
TORTANUS DISCAUDATUS	S&F	17.5	.0	.0	.0	.0	.0	.0	.0
UNIDENTIFIED CUPEPODITES		2765.2	9.7	2762.4	426.4	178.3	.0	.0	369.6
UNIDENTIFIED MEDUSAE		.0	.0	.0	12.2	.0	7.9	.0	.0
LIMACINA SP.		20.7	491.6	.0	61.9	89.2	568.1	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 9 TO 16 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	9	10	11	12	13	14	15	16
AMPHIPODS*								
PARATHEMISTO SP.	7.3	37.4	11.2	.0	56.4	22.6	245.8	178.3
CYPHOCARIS SP.	.0	.0	.0	.0	.0	.0	.0	9.9
CHAETOGNATHS*								
SAGITTA ELEGANS	1005.7	1765.9	167.6	746.6	258.0	1515.4	513.9	2136.8
EUKROHNIA HAMATA	.0	.0	.0	.0	.0	.0	872.5	297.2
EGGS LARVA*								
UNIDENTIFIED EGGS.	3259.8	8587.2	1211.2	69550.3	15794.7	55912.1	5820.9	.0
COPEPOD NAUPLII	16047.2	17650.6	5363.1	519.0	11658.2	2396.1	2910.1	.0
BARNACLE NAUPLII	752.3	.0	345.8	.0	375.8	.0	.0	.0
EUPHAUSID LARVA	258.0	279.3	22.3	1612.9	67.6	890.2	89.4	.0
DECAPOD LARVA	15.1	29.6	.0	33.5	45.2	57.2	55.9	118.9
EUPHAUSIDS*								
JUVENILES	7.3	.0	.0	.0	.0	.0	.0	640.4
EUPHAUSIA PACIFICA	.0	.0	.0	.0	.0	11.6	.0	79.2
THYSANOESSA SPINIFERA	.0	.0	.0	.0	.0	80.4	22.3	9.9
LARVACEANS*								
LARVACEANS	.0	.0	.0	173.2	.0	.0	386.0	.0
MEDUSAE*								
PHIALIDIUM SP.	7.3	.0	.0	.0	156.4	.0	55.9	99.1
PROBOSCIDACTYLA SP.	.0	.0	.0	.0	.0	.0	.0	19.8
OSTRACODS*								
CONCHOECIA SP.	.0	.0	.0	.0	.0	11.6	22.3	89.2
SIPHONOPHORES*								
NECTOPHORES BRACTS	.0	.0	.0	.0	.0	.0	11.2	89.2
COPEPODS*								
ACARTIA LONGIREMIS <=S3/4	5766.8	234.6	173.2	178.8	5640.9	2396.1	.0	4002.6
ACARTIA LONGIREMIS <=S4/5	76106.0	2171.0	1864.2	6920.7	29709.6	55912.1	2317.0	11006.7
ACARTIA LONGIREMIS S6M	20058.8	3351.4	1367.6	4671.5	29709.6	29553.8	430.7	4669.8
ACARTIA LONGIREMIS S								
CALANUS MARSHALLAE S3	791.9	752.5	262.6	156.4	1024.8	2510.9	1510.9	3345.3
CALANUS MARSHALLAE S4	193.8	559.2	67.0	368.7	213.3	91.6	4622.7	6165.6
CALANUS MARSHALLAE S5	67.0	663.1	122.9	111.7	290.4	4120.0	7845.7	3966.4
CALANUS MARSHALLAE S6M	37.4	276.0	55.9	44.7	11.2	942.2	67.0	353.2
CALANUS MARSHALLAE S6F	82.1	6588.8	189.9	55.9	33.5	1073.8	1510.9	3847.5
CALANUS PACIFICUS S6M	.0	.0	.0	11.2	.0	.0	.0	.0
CALANUS PACIFICUS S6F	.0	.0	.0	11.2	22.3	.0	.0	.0
CALANUS SP. S1/2	1504.5	.0	346.4	524.6	3008.9	3195.1	1819.3	1333.9
CENTROPAGES ABDOMINALIS S5	250.8	.0	.0	.0	.0	.0	727.8	333.3
CENTROPAGES ABDOMINALIS S6M	295.4	.0	.0	.0	.0	.0	.0	9.9
CENTROPAGES ABDOMINALIS S6F	310.9	.0	.0	.0	22.9	.0	11.2	9.9
EUCALANUS BUNGI S1/2	167.6	7.4	.0	.0	258.0	17.2	.0	.0
EUCALANUS BUNGI S3	.0	.0	.0	.0	.0	.0	33.5	29.7
EUCALANUS BUNGI S4	.0	.0	.0	.0	.0	.0	22.3	19.8

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	9	10	11	12	13	14	15	16
EUCALANUS BUNCI S5M	.0	.0	.0	11.2	.0	5.6	11.2	39.6
EUCALANUS BUNCI S5F	.0	15.1	.0	.0	.0	.0	22.3	19.8
EUCALANUS BUNCI S6F	.0	.0	.0	.0	11.2	22.8	134.1	267.5
EUCHAETA JAPONICA S1/2	.0	.0	.0	.0	.0	.0	22.3	353.2
EUCHAETA JAPONICA S3	.0	.0	.0	.0	11.2	.0	44.7	19.8
EUCHAETA JAPONICA S4	.0	.0	.0	.0	.0	.0	.0	9.9
EUCHAETA JAPONICA S5M	.0	.0	.0	.0	.0	.0	.0	9.9
EUCHAETA JAPONICA S5F	.0	.0	.0	.0	.0	.0	.0	29.7
METRIDIA SP. <=S3	.0	241.9	.0	.0	22.9	.0	2194.1	1333.4
METRIDIA SP. S4	.0	92.1	.0	11.2	.0	46.0	2261.1	333.3
METRIDIA PACIFICA S5M	.0	44.7	.0	22.3	.0	28.8	413.9	696.9
METRIDIA PACIFICA S5F	.0	74.3	.0	11.2	22.3	46.0	33.5	29.7
METRIDIA PACIFICA S6M	7.3	264.2	33.5	.0	.0	40.0	.0	.0
METRIDIA PACIFICA S6F	.0	.0	.0	.0	.0	.0	.0	673.6
NEOCALANUS CRISTATUS S2	.0	.0	.0	11.2	.0	.0	.0	.0
NEOCALANUS CRISTATUS S3	.0	.0	.0	.0	.0	.0	55.9	.0
NEOCALANUS CRISTATUS S4	.0	.0	.0	.0	.0	.0	178.7	333.3
NEOCALANUS CRISTATUS S5	.0	.0	.0	.0	.0	.0	.0	1129.3
NEOCALANUS PLUMCHRUS S5	.0	7.3	.0	.0	.0	22.8	22.3	.0
OITHONA HELGOLANDICA	6769.8	7921.2	6139.7	2427.9	7289.5	15980.5	12496.9	71045.4
OITHONA SPINIROSTRIS	.0	.0	33.5	.0	387.0	74.4	783.7	2001.0
PARACALANUS SP. S5	250.8	.0	.0	.0	.0	.0	.0	.0
PARACALANUS SP. S6M	.0	.0	.0	173.2	.0	.0	.0	.0
PSEUDOCALANUS SP. <=S3	9277.4	10792.2	15052.0	4152.5	20683.9	27956.2	13096.8	10340.0
PSEUDOCALANUS SP. S4	3009.1	16892.2	4844.1	3287.1	19931.7	32748.4	13460.4	10340.0
PSEUDOCALANUS SP. S5M	2507.6	8211.7	3460.3	1903.4	8273.4	7188.7	4365.8	2334.9
PSEUDOCALANUS SP. S5F	2507.6	2816.2	1211.2	692.2	9025.7	11182.3	3274.3	3669.2
PSEUDOCALANUS SP. S6M	1504.5	4692.2	3979.3	1384.4	4888.7	7987.3	727.8	3335.4
PSEUDOCALANUS SP. S6F	3259.8	3988.3	6055.3	4325.1	3760.6	15176.4	10913.9	13341.6
SCOLECITHRICELLA MINOR <=S4	.0	.0	.0	.0	.0	.0	.0	1000.5
SCOLECITHRICELLA MINOR S5	.0	.0	.0	173.2	.0	.0	363.6	343.2
SCOLECITHRICELLA MINOR S6M	.0	.0	.0	.0	.0	.0	78.2	.0
SCOLECITHRICELLA MINOR S6F	.0	29.6	11.2	33.5	11.2	22.8	100.5	726.6

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 VARIANTS LIST - STATIONS 9 TO 16 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/100. METER)

STATION I.D.	9	10	11	12	13	14	15	16
AETIDEUS ARMATUS S6F	.0	.0	.0	.0	.0	.0	.0	9.9
AETIDEUS ARMATUS S5	.0	.0	.0	.0	.0	.0	.0	9.9
BARNACLE CYPRIDS	.0	.0	.0	.0	45.2	22.8	44.7	109.0
BIVALVE LARVA	250.8	.0	.0	.0	.0	.0	363.6	.0
BRADYIDIUS SP. S5	.0	7.3	.0	.0	.0	.0	.0	.0
CLAUSOCALANUS SP. S6F	.0	234.6	.0	.0	.0	.0	.0	.0
CLIONE SP.	.0	.0	.0	.0	.0	.0	.0	39.6
CORYCAEUS SP.	.0	.0	173.2	.0	.0	.0	.0	.0
CRYPTONISCID	.0	7.3	.0	.0	.0	22.8	.0	.0
ECHINOPLUTEUS LARVAE	.0	.0	.0	.0	375.8	798.6	.0	333.3
EPILABIDOCERA SP. <=S4	.0	.0	.0	178.8	409.9	.0	.0	.0
EPILABIDOCERA AMPHITRITE S5	.0	.0	.0	.0	.0	5.6	.0	.0
FISH LARVAE	.0	.0	.0	89.4	11.2	74.4	.0	39.6
HETERORHABDUS TANNERI S6M	.0	.0	.0	.0	.0	.0	.0	9.9
HETERORHABDUS TANNERI <=S4	.0	.0	.0	.0	.0	.0	.0	9.9
MICROCALANUS SP. S5	.0	.0	.0	.0	.0	.0	.0	667.2
MICROCALANUS SP. S6F	.0	.0	.0	.0	375.8	.0	.0	.0
PERACLIS SP.	.0	.0	.0	.0	.0	5.6	.0	333.3
POLYCHAETE LARVAE	.0	.0	.0	.0	820.4	.0	363.6	.0
RACOVITZANUS ANTARCTICUS S6F	.0	.0	.0	.0	.0	.0	.0	9.9
RACOVITZANUS ANTARCTICUS S5	.0	.0	.0	.0	.0	.0	.0	39.6
RACOVITZANUS ANTARCTICUS <=S4	.0	.0	.0	.0	.0	.0	22.3	353.2
SIPHONOPHORE PNEUMATOPHORE	.0	.0	.0	11.2	.0	.0	.0	9.9
TOMOPTERIS SEPTENTRIONALIS	.0	.0	.0	.0	.0	.0	44.7	9.9
TORTANUS DISCAUDATUS S6F	7.3	.0	.0	.0	.0	.0	.0	.0
TORTANUS DISCAUDATUS S6M	.0	7.3	.0	.0	.0	.0	22.3	.0
UNIDENTIFIED COPEPODITES	250.8	.0	.0	173.2	1128.1	798.6	1841.1	333.3
UNIDENTIFIED EUPHASID	.0	.0	.0	.0	.0	.0	.0	9.9
UNIDENTIFIED MEDUSAE	7.3	.0	.0	.0	.0	40.0	.0	9.9
UNIDENTIFIED PTEROPOD	.0	.0	.0	.0	.0	.0	.0	1667.7
LIMACINA SP.	15.1	29.6	.0	33.5	33.5	22.8	2205.2	2100.1

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 17 TO 22
(VALUES ARE NUMBER OF ORGANISMS/S.. METER)

STATION I.D.	17	18	19	20	21	22
AMPHIPODS*						
PARATHEMISTO SP.	55.9	.0	.0	22.3	22.1	34.8
CHAETOGNATHS*						
SAGITTA ELEGANS	1021.8	.0	126.9	413.4	546.6	1995.7
CTENOPHORES*						
PLEUROBRACHIA SP.	.0	.0	.0	.0	.0	34.8
EGGS LARVA*						
UNIDENTIFIED EGGS.	658.1	.0	3052.1	16914.0	5673.6	2970.6
COPEPOD NAUPLII	658.1	2987.6	4273.1	909.5	90.2	14853.0
BARNACLE NAUPLII	.0	.0	.0	182.1	90.2	1192.5
EUPHAUSID LARVA	33.5	32.2	628.6	1135.7	1384.2	10397.1
DECAPOD LARVA	.0	42.9	90.6	.0	11.1	444.7
EUPHAUSIDS*						
JUVENILES	.0	.0	.0	.0	.0	21.8
THYSANOESSA SPINIFERA	33.5	.0	.0	.0	.0	.0
LARVACEANS*						
LARVACEANS	.0	.0	305.0	.0	.0	4460.1
MEDUSAE*						
PHIALIDIUM SP.	.0	42.9	18.1	.0	.0	173.4
PROPOSCIDACTYLA SP.	11.2	.0	9.1	.0	.0	8.8
SIPHONOPHORES*						
NECTOPHORES BRACTS	.0	.0	.0	.0	.0	8.8
COPEPODS*						
ACARTIA LONGIREMIS <=S3/4	329.0	498.2	2136.6	909.5	1800.8	4455.9
ACARTIA LONGIREMIS <=S4/5	2393.3	12780.6	17092.0	3743.0	10356.3	31488.4
ACARTIA LONGIREMIS S6M	3481.6	8133.2	4578.2	909.5	1891.0	22873.6
ACARTIA LONGIREMIS S						
CALANUS MARSHALLAE S3	3208.4	193.1	1393.2	156.4	77.5	2153.1
CALANUS MARSHALLAE S4	697.8	.0	281.0	33.5	44.3	1051.7
CALANUS MARSHALLAE S5	418.4	.0	108.8	11.2	33.2	112.9
CALANUS MARSHALLAE S6M	357.5	10.7	27.2	.0	.0	30.2
CALANUS MARSHALLAE S6F	11.2	.0	72.5	145.2	110.6	86.9
CALANUS PACIFICUS <=S5	11.2	.0	9.1	.0	.0	.0
CALANUS SP. S1/2	3631.8	85.6	610.5	146.9	865.8	8614.8
CENTROPAGES ABDOMINALIS <=S4	.0	171.6	.0	.0	.0	.0
CENTROPAGES ABDOMINALIS S5	.0	171.6	.0	.0	.0	.0
CENTROPAGES ABDOMINALIS S6M	.0	21.5	395.7	.0	.0	1214.3
CENTROPAGES ABDOMINALIS S6F	.0	171.6	1347.9	.0	.0	1203.6
EUCALANUS BUNGI S5M	.0	10.7	9.1	22.3	.0	.0
EUCALANUS BUNGI S5F	.0	.0	9.1	.0	.0	.0
EUCALANUS BUNGI S6F	.0	.0	9.1	.0	.0	8.8
METRIDIA SP. <=S3	3400.0	.0	.0	90.5	.0	.0
METRIDIA SP. S4	340.2	.0	9.1	11.2	.0	.0
METRIDIA PACIFICA S5M	44.7	.0	.0	.0	11.1	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 17 TO 22 PAGE 2

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	17	18	19	20	21	22
METRIDIA PACIFICA S5F	33.5	.0	.0	.0	.0	.0
METRIDIA PACIFICA S6M	407.3	.0	9.1	.0	.0	.0
METRIDIA PACIFICA S6F	27.3	.0	.0	.0	.0	.0
OITHONA HELGOLANDICA	6020.7	3689.6	8549.0	5722.9	298.8	13783.5
OITHONA SPINIROSTRIS	.0	10.7	9.1	11.2	.0	.0
PARACALANUS SP. S5	.0	32.2	.0	.0	.0	594.0
PARACALANUS SP. S6M	.0	177.0	.0	.0	.0	297.0
PARACALANUS SP. S6F	.0	21.5	.0	.0	.0	.0
PSEUDOCALANUS SP. <=S3	6254.2	1162.1	15871.0	3000.6	4558.2	8614.8
PSEUDOCALANUS SP. S4	11520.7	1421.7	14039.9	2182.7	2945.0	11585.4
PSEUDOCALANUS SP. S5M	5266.5	883.8	2747.1	1364.2	1524.8	3267.6
PSEUDOCALANUS SP. S5F	5925.1	85.8	2441.6	363.7	357.4	8317.5
PSEUDOCALANUS SP. S6M	987.7	503.6	3052.1	91.1	22.1	4455.9
PSEUDOCALANUS SP. S6F	13496.1	803.3	13734.9	1364.2	749.1	68.5
SCOLECITHRICELLA MINOR S5	.0	.0	9.1	.0	.0	.0
SCOLECITHRICELLA MINOR S6F	.0	.0	9.1	11.2	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 VARIANTS LIST - STATIONS 17 TO 22 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	17	18	19	20	21	22
BARNACLE CYPRIDS	22.3	.0	27.2	.0	.0	4.2
CRYPTONISCID	11.2	21.5	18.1	.0	.0	4.2
CUMACEA	.0	.0	.0	5.6	.0	.0
CYMBULIDAE	.0	.0	9.1	.0	.0	.0
ECHINOPLUTEUS LARVAE	.0	.0	.0	.0	.0	297.0
EPILABIDOCERA SP. <=S4	.0	10.7	.0	.0	.0	8.8
FISH LARVAE	.0	.0	9.1	.0	.0	.0
PERACLIS SP.	.0	.0	314.1	.0	.0	4.2
POLYCHAETE LARVAE	.0	.0	610.5	.0	.0	2109.5
RACOVITZANUS ANTARCTICUS <=S4	11.2	.0	.0	.0	.0	.0
TORTANUS DISCAUDATUS S6F	.0	.0	.0	.0	.0	4.2
TORTANUS DISCAUDATUS S6M	.0	.0	.0	.0	.0	4.2
UNIDENTIFIED COPEPODITES	329.0	187.7	305.0	.0	270.0	297.0
UNIDENTIFIED MEDUSAE	122.9	.0	9.1	.0	.0	4.2
UNIDENTIFIED PTEROPOD	.0	.0	3967.6	636.3	.0	.0
LIMACINA SP.	781.0	166.2	504.5	.0	112.3	637.3

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 23 TO 46

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	23	27	33	34	42	46
AMPHIPODS*	31.6	31.9	34.0	48.0	10.9	67.0
PARATHEMISTO SP.	2538.7	435.8	487.4	910.4	710.4	815.6
CHAETOGNATHS*	.0	.0	108.1	.0	21.9	11.2
SAGITTA ELEGANS						
EUKROHNIA HAMATA	6232.7	8338.9	433.6	927.5	1103.8	1021.2
EGGS LARVA*	389.5	3403.6	.0	.0	736.1	.0
UNIDENTIFIED EGGS.	4265.3	.0	.0	.0	.0	.0
COPEPOD NAUPLII	791.7	1042.2	155.9	21.2	.0	.0
BARNACLE NAUPLII	43.8	31.9	54.3	16.0	.0	.0
EUPHAUSID LARVA	25.3	.0	135.5	.0	.0	.0
DECAPOD LARVA	12.7	.0	182.8	.0	.0	.0
EUPHAUSIDS*	18.9	.0	.0	32.0	21.9	89.4
EUPHAUSIA PACIFICA	.0	.0	.0	5.2	.0	.0
THYSANOESSA SPINIFERA	2337.4	1361.6	108.1	927.5	367.8	.0
MEDUSAE*	32333.0	5105.4	2310.0	15768.6	26862.8	13954.2
PHIALIDIUM SP.	23373.4	2850.3	4707.8	6307.4	11039.3	12592.7
PROBOSCIDACTYLA SP.	1621.1	1244.2	2601.4	381.7	867.2	2472.1
COPEPODS*	175.9	584.6	7261.5	1044.6	327.9	2287.7
ACARTIA LONGIREMIS <=S3/4	942.6	287.0	13764.4	8063.4	362.5	290.5
ACARTIA LONGIREMIS <=S4/5	69.3	74.4	216.8	201.4	109.3	122.9
ACARTIA LONGIREMIS S6M	2419.4	85.0	3901.6	1760.4	476.0	1624.0
ACARTIA LONGIREMIS S	5.7	.0	.0	.0	.0	.0
CALANUS MARSHALLAE S3	3116.4	1000.2	108.1	185.4	367.8	.0
CALANUS MARSHALLAE S4	.0	.0	.0	556.7	.0	1021.2
CALANUS MARSHALLAE S5	394.2	170.1	6.6	370.9	.0	.0
CALANUS MARSHALLAE S6M	6.1	10.6	.0	.0	.0	.0
CALANUS MARSHALLAE S6F	6.1	10.6	.0	16.0	10.9	.0
CALANUS PACIFICUS S6F	6.1	10.6	6.6	10.8	.0	11.2
CALANUS SP. S1/2	6.1	10.6	20.3	16.0	.0	.0
CENTROPAGES ABDOMINALIS <=S4	6.1	.0	20.3	.0	.0	11.2
CENTROPAGES ABDOMINALIS S5	18.9	.0	26.9	.0	10.9	.0
CENTROPAGES ABDOMINALIS S6M	12.7	.0	108.1	5.2	43.7	22.3
CENTROPAGES ABDOMINALIS S6F	.0	.0	6.6	.0	.0	.0
EUCALANUS BUNGI S3	.0	.0	13.7	.0	10.9	.0
EUCALANUS BUNGI S4	.0	.0	6.6	.0	.0	.0
EUCALANUS BUNGI S5M	.0	.0	541.7	1484.2	.0	.0
EUCALANUS BUNGI S5F	.0	10.6	670.7	742.1	373.2	.0
EUCALANUS BUNGI S6F	408.3	.0	304.6	.0	21.9	22.3
EUCHAETA JAPONICA S3						
EUCHAETA JAPONICA S4						
EUCHAETA JAPONICA S6M						
METRIDIA SP. <=S3						
METRIDIA SP. S4						
METRIDIA PACIFICA S6M						

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 23 TO 46 PAGE 2
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	23	27	33	34	42	46
METRIDIA PACIFICA S5F	37.7	.0	148.7	.0	43.7	11.2
METRIDIA PACIFICA S6M	62.7	.0	365.5	.0	564.5	11.2
METRIDIA PACIFICA S6F	232.5	.0	47.2	.0	54.6	33.5
NEOCALANUS CRISTATUS S2	.0	.0	.0	.0	10.9	.0
NEOCALANUS CRISTATUS S3	.0	.0	13.7	10.4	10.9	.0
NEOCALANUS CRISTATUS S4	.0	.0	196.5	21.2	21.9	.0
NEOCALANUS CRISTATUS S5	.0	.0	26.9	10.4	.0	.0
NEOCALANUS PLUMCHRUS S4	.0	.0	.0	5.2	.0	.0
NEOCALANUS PLUMCHRUS S5	5.7	.0	47.2	5.2	10.9	11.2
OITHONA HELGOLANDICA	6810.8	9306.2	26553.6	12790.6	15826.8	22122.4
OITHONA SPINIPOSTPIS	779.0	53.2	555.4	1182.5	87.4	1361.4
PSEUDOCALANUS SP. <=S3	15971.8	340.2	3901.6	10759.7	4783.6	8506.9
PSEUDOCALANUS SP. S4	12076.4	2722.8	3901.6	10759.7	10671.6	14635.2
PSEUDOCALANUS SP. S5M	2726.9	2892.9	975.3	4452.3	4415.8	5445.8
PSEUDOCALANUS SP. S5F	3116.4	2041.9	1517.5	319.7	2943.7	4424.6
PSEUDOCALANUS SP. S6M	1947.9	3063.5	1083.9	1484.2	1103.8	3403.4
PSEUDOCALANUS SP. S6F	5843.2	7998.8	6936.5	3895.6	8095.6	14635.2
SCOLECITHRICELLA MINOR <=S4	.0	.0	.0	556.7	367.8	340.2
SCOLECITHRICELLA MINOR S5	.0	10.6	324.9	561.9	378.7	.0
SCOLECITHRICELLA MINOR S6M	.0	.0	.0	21.2	.0	.0
SCOLECITHRICELLA MINOR S6F	369.5	21.3	474.2	37.2	21.9	33.5

ZOOPLANKTON HAUL RESULTS - CRUISE 79-04 VARIANTS LIST - STATIONS 23 TO 46 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	23	27	33	34	42	46
BARNACLE CYPRIDS	.0	31.9	47.2	5.2	32.8	.0
BIVALVE LARVA	.0	.0	108.1	185.4	.0	.0
CLAUSOCALANUS SP. S6F	.0	.0	108.1	.0	.0	.0
CORYCAEUS SP.	389.5	.0	.0	.0	.0	.0
CRYPTONISCID	12.7	.0	26.9	10.8	10.9	340.8
FISH LARVAE	6.1	31.9	6.6	5.2	.0	.0
MICROCALANUS SP. S5	.0	.0	.0	370.9	367.8	.0
NATANTIA	12.7	.0	.0	.0	.0	.0
ONCAEA SP.	.0	.0	108.1	.0	.0	.0
POLYCHAETE LARVAE	.0	21.3	.0	5.2	.0	.0
RACOVITZANUS ANTARCTICUS S5	.0	.0	.0	.0	21.9	.0
TORTANUS DISCAUDATUS S6M	.0	.0	.0	.0	10.9	.0
UNIDENTIFIED COPEPODITES	389.5	340.2	115.0	375.7	.0	.0
UNIDENTIFIED MEDUSAE	.0	.0	6.6	.0	.0	33.5
UNIDENTIFIED PTEROPOD	1947.9	.0	216.8	.0	.0	.0
LIMACINA SP.	6.1	191.3	826.5	615.0	400.5	22.3

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 1 TO 15

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	1	4	6	8	10	12	13	15
AMPHIPODS*								
UNIDENTIFIED JUVENILES	.0	.0	.0	.0	.0	.0	40.4	43.2
PARATHEMISTO SP.	68.7	5.5	43.4	10.1	5.6	.0	.0	11.2
EUPRIMNO SP.	5.6	.0	.0	.0	.0	.0	.0	.0
CYPHOCARIS SP.	27.9	.0	.0	.0	.0	.0	.0	5.6
CHAETOGNATHS*								
UNIDENTIFIED JUVENILES	963.2	509.9	442.1	194.1	233.2	186.7	437.9	154.9
SAGITTA ELEGANS	340.8	33.2	.0	463.9	5.6	.0	.0	44.7
EUKROHNIA HAMATA	238.8	.0	.0	10.1	.0	.0	.0	38.4
CTENOPHORES*								
PLEUROBRACHIA SP.	11.2	.0	.0	.0	.0	.0	.0	.0
EGGS LARVA*								
UNIDENTIFIED EGGS.	395.7	495.4	547.2	1429.2	615.6	1227.6	2433.2	6419.2
COPEPOD NAUPLII	44.0	.0	201.6	1270.4	175.9	227.3	64.1	172.9
BARNACLE NAUPLII	.0	.0	86.4	163.9	44.0	369.3	32.0	.0
EUPHAUSID LARVA	703.6	67.2	518.3	3493.6	363.0	682.0	680.8	151.3
DECAPOD LARVA	5.6	.0	39.8	20.2	71.9	644.6	.0	.0
EUPHAUSIDS*								
JUVENILES	1114.2	.0	.0	35.3	22.3	.0	.0	16.8
EUPHAUSIA PACIFICA	22.3	5.5	.0	5.0	.0	.0	.0	.0
THYSANOESSA SPINIFERA	.0	.0	.0	5.0	.0	.0	.0	.0
LARVACEANS*								
LARVACEANS	1011.4	.0	.0	.0	.0	136.4	32.0	.0
MEDUSAE*								
PHIALIDIUM SP.	.0	.0	3.7	5.0	.0	.0	.0	.0
AGLANTHA SP.	116.6	.0	.0	.0	.0	.0	.0	.0
PROBOSCIDACTYLA SP.	5.6	.0	.0	.0	.0	.0	.0	.0
OSTRACODS*								
CONCHOECIA SP.	439.7	.0	.0	.0	.0	.0	.0	81.6
SIPHONOPHORES*								
NECTOPHORES BRACTS	237.4	.0	.0	.0	.0	5.6	4.2	.0
COPEPODS*								
ACARTIA CLAUSII <=S5	.0	.0	57.4	.0	.0	.0	.0	.0
ACARTIA CLAUSII S6F	.0	.0	144.0	317.7	87.9	.0	.0	.0
ACARTIA LONGIREMIS <=S3/4	87.9	.0	28.8	.0	.0	454.7	.0	86.5
ACARTIA LONGIREMIS <=S4/5	1946.9	720.6	3138.9	1111.6	703.6	4001.1	608.3	648.4
ACARTIA LONGIREMIS S6M	1627.0	1126.0	2102.2	3017.2	703.6	1318.6	512.3	1123.9
ACARTIA LONGIREMIS S								
CALANUS MARSHALLAE S3	131.9	4188.7	1756.6	4280.3	1275.2	759.8	1248.6	367.4
CALANUS MARSHALLAE S4	351.8	5855.1	1987.0	1823.1	1934.9	178.8	672.3	583.6
CALANUS MARSHALLAE S5	707.6	720.6	273.8	3408.4	1363.1	424.6	896.5	367.4
CALANUS MARSHALLAE S6M	.0	.0	.0	79.3	44.0	.0	.0	43.2
CALANUS MARSHALLAE S6F	219.9	675.6	14.6	1109.7	175.9	89.4	1504.8	108.1
CALANUS PACIFICUS <=S5	751.8	.0	28.8	.0	.0	45.5	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 1 TO 15 PAGE 2

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	1	4	6	8	10	12	13	15
CALANUS PACIFICUS S6F	87.9	.0	.0	.0	.0	.0	.0	.0
CALANUS SP. S1/2	44.0	1711.5	1929.4	1905.6	703.6	1864.1	2337.2	389.1
CALANUS TENUICORNIS <=S4	87.9	.0	.0	.0	.0	.0	.0	.0
CALANUS TENUICORNIS S5	753.1	.0	.0	158.8	.0	.0	.0	.0
CALANUS TENUICORNIS S6M	219.9	45.1	.0	.0	.0	.0	.0	.0
CALANUS TENUICORNIS S6F	747.8	.0	.0	317.7	.0	.0	.0	.0
CENTROPAGES ABDOMINALIS <=S4	.0	.0	.0	.0	.0	45.5	.0	.0
CENTROPAGES ABDOMINALIS S5	.0	.0	57.6	158.8	.0	45.5	4.2	.0
CENTROPAGES ABDOMINALIS S6M	.0	45.1	61.2	.0	44.0	90.9	36.2	.0
CENTROPAGES ABDOMINALIS S6F	.0	.0	32.4	.0	60.7	45.5	8.4	.0
EUCALANUS BUNGI S1/2	.0	.0	.0	.0	.0	.0	.0	21.6
EUCALANUS BUNGI S3	374.1	.0	.0	.0	.0	.0	.0	.0
EUCALANUS BUNGI S4	5.6	.0	.0	.0	.0	.0	.0	5.6
EUCALANUS BUNGI S5F	.0	11.1	.0	5.0	.0	.0	.0	5.6
EUCALANUS BUNGI S6F	67.0	11.1	3.7	.0	5.6	.0	.0	.0
EUCHAETA JAPONICA S3	87.9	.0	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S4	110.3	.0	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S5M	44.7	.0	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S5F	39.1	.0	.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S6M	5.6	.0	.0	.0	.0	.0	.0	.0
METRIDIA SP. <=S3	.0	.0	.0	.0	.0	.0	96.1	43.2
METRIDIA SP. S4	44.0	230.8	.0	.0	.0	.0	96.1	21.6
METRIDIA PACIFICA S5M	659.6	180.1	.0	158.8	5.6	90.9	192.1	108.1
METRIDIA PACIFICA S5F	263.8	90.1	29.8	.0	.0	5.6	4.2	21.6
METRIDIA PACIFICA S6M	219.9	5.5	.0	378.2	44.0	45.5	36.2	64.8
METRIDIA PACIFICA S6F	1143.3	72.7	3.7	40.3	99.1	56.7	61.4	105.2
NEOCALANUS CRISTATUS S2	44.0	.0	.0	.0	.0	.0	.0	.0
NEOCALANUS CRISTATUS S3	.0	.0	.0	.0	5.6	.0	.0	.0
NEOCALANUS CRISTATUS S4	27.9	.0	.0	.0	.0	.0	4.2	.0
NEOCALANUS CRISTATUS S5	312.8	.0	.0	5.0	.0	.0	.0	5.6
NEOCALANUS PLUMCHRUS S5	.0	.0	.0	5.0	.0	.0	.0	.0
OITHONA HELGOLANDICA	1055.4	.0	201.6	3334.8	131.9	.0	192.1	410.7
OITHONA SPINIROSTRIS	395.7	225.2	86.4	158.8	439.7	45.5	64.1	216.1
PARACALANUS SP. <=S4	.0	.0	.0	.0	.0	45.5	.0	.0
PARACALANUS SP. S5	.0	.0	144.0	158.8	87.9	318.3	.0	21.6
PARACALANUS SP. S6M	.0	.0	57.6	317.7	44.0	90.9	.0	.0
PARACALANUS SP. S6F	.0	45.1	115.2	158.8	87.9	545.6	64.1	64.8
PSEUDOCALANUS SP. <=S3	44.0	.0	172.8	2064.4	87.9	45.5	16.3	216.1
PSEUDOCALANUS SP. S4	967.4	.0	86.4	5716.8	263.8	45.5	32.6	432.3
PSEUDOCALANUS SP. S5M	219.9	180.1	115.2	1429.2	44.0	136.4	.0	216.1
PSEUDOCALANUS SP. S5F	.0	180.1	172.8	2699.6	175.9	136.4	32.6	281.0
PSEUDOCALANUS SP. S6M	.0	630.6	259.2	3493.6	923.5	90.9	146.5	497.1
PSEUDOCALANUS SP. S6F	1231.3	4549.0	2822.2	14768.4	5848.5	3273.6	630.0	1080.7
SCOLECITHRICELLA MINOR <=S4	44.0	.0	.0	.0	.0	.0	.0	.0
SCOLECITHRICELLA MINOR S5	313.4	45.1	.0	158.8	.0	.0	16.3	86.5
SCOLECITHRICELLA MINOR S6M	131.9	45.1	.0	.0	44.0	.0	.0	64.8
SCOLECITHRICELLA MINOR S6F	401.3	45.1	32.4	163.9	131.9	.0	.0	178.5

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 1 TO 15

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	1	4	6	8	10	12	13	15
AEGISTHUS SP.	.0	.0	.0	.0	.0	.0	.0	5.6
AETIDEUS ARMATUS S6F	55.1	.0	.0	.0	44.0	.0	.0	43.2
BARNACLE CYPRIDS	.0	.0	.0	.0	.0	.0	.0	.0
BIVALVE LARVA	87.9	.0	.0	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6M	87.9	.0	.0	.0	.0	.0	.0	.0
CANDACIA PIPINNATA <=S4	16.8	.0	.0	.0	.0	.0	.0	.0
CANDACIA PIPINNATA S5	5.6	.0	.0	.0	.0	.0	.0	.0
CANDACIA PIPINNATA S6M	16.8	.0	.0	.0	.0	.0	.0	.0
CANDACIA PIPINNATA S6F	33.5	.0	.0	.0	.0	.0	.0	.0
CEPHALOPOD	1319.2	.0	.0	.0	.0	.0	.0	.0
CHIRIDIUS GRACILIS S6F	219.9	.0	.0	.0	.0	.0	.0	.0
CHIRIDIUS GRACILIS S6M	2814.3	90.1	.0	158.8	.0	.0	.0	.0
CHIRIDIUS GRACILIS <=S4	5.6	.0	.0	.0	.0	.0	.0	.0
CLAUSOCALANUS SP. S6F	.0	45.1	28.8	158.8	.0	.0	.0	.0
CUMACEA	5.6	.0	.0	.0	.0	.0	.0	5.6
EPILABIDOCERA AMPHITRITE S6M	.0	.0	.0	.0	.0	.0	.0	.0
EPILABIDOCERA AMPHITRITE S5	5.6	11.1	.0	10.1	.0	.0	.0	.0
EUCHIRELLA SP. S6M	5.6	.0	.0	.0	.0	.0	.0	.0
EUCHIRELLA SP. S5	5.6	.0	.0	.0	.0	.0	.0	.0
EVADNE SP.	.0	.0	.0	.0	.0	.0	4.2	.0
GAETANUS SP. S6F	27.9	.0	.0	.0	.0	.0	.0	.0
GAETANUS SP. S5	55.1	.0	.0	.0	.0	.0	.0	.0
GAETANUS SP. <=S4	5.6	.0	.0	.0	.0	.0	.0	.0
GAIDIUS VARIABLIS S6M	.0	5.5	.0	.0	.0	.0	.0	.0
MICROCALANUS SP. S6F	.0	.0	.0	.0	44.0	.0	.0	.0
ONCAEA SP.	175.9	.0	.0	.0	.0	.0	.0	.0
PERACLIS SP.	72.6	.0	.0	.0	.0	.0	.0	.0
PLEUROMAMMA SP.	16.8	.0	.0	.0	.0	.0	.0	.0
PLEUROMAMMA SCUTULLATA S5	.0	.0	.0	.0	.0	45.5	.0	.0
PLEUROMAMMA SCUTULLATA <=S4	.0	.0	.0	.0	.0	45.5	.0	.0
PODON SP.	11.2	.0	.0	.0	.0	.0	.0	.0
SCAPHOCALANUS SP. <=S4	16.8	.0	.0	.0	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S6F	.0	151.7	97.4	10.1	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S6M	.0	61.7	.0	.0	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S5	.0	225.2	.0	.0	.0	.0	.0	.0
SIPHONOPHORE PLANULA	5.6	.0	.0	.0	131.9	.0	.0	.0
SPINOCALANUS BREVICAUDATUS <=S4	1440.7	.0	.0	.0	.0	.0	.0	.0
SPINOCALANUS BREVICAUDATUS S5	.0	5.5	.0	.0	.0	.0	.0	.0
TESSARABRACHION OCULATUS	5.6	.0	.0	.0	.0	45.5	.0	.0
UNDINELLA SP.	.0	.0	.0	.0	.0	.0	.0	.0
LIMACINA SP.	703.6	.0	.0	163.9	5.6	11.2	12.6	5.6

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 17 TO 35

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	17	19	21	23	24	27	31	35
AMPHIPODS*								
UNIDENTIFIED JUVENILES	5.7	5.7	.0	276.9	.0	.0	39.6	11.2
PARATHEMISTO SP.	17.0	85.9	91.9	51.9	11.5	.0	33.9	.0
CYPHOCARIS SP.	.0	.0	5.7	34.6	.0	.0	.0	.0
CHAETOGNATHS*								
UNIDENTIFIED JUVENILES	783.7	251.1	.0	294.2	5.8	18.6	33.9	176.0
SAGITTA ELEGANS	942.7	486.5	362.0	17.3	11.5	31.0	.0	2737.4
EUKROHNIA HAMATA	17.0	143.1	275.8	444.1	.0	.0	.0	259.8
CTENOPHORES*								
PLEUROBRACHIA SP.	.0	.0	17.2	11.5	431.7	18.6	248.7	.0
EGGS LARVA*								
UNIDENTIFIED EGGS.	51.1	.0	.0	2768.7	.0	195.5	.0	1935.5
COPEPOD NAUPLII	.0	.0	.0	92.3	3155.7	10947.3	.0	.0
BARNACLE NAUPLII	.0	.0	.0	.0	525.9	391.0	.0	.0
EUPHAUSID LARVA	.0	90.1	.0	461.4	14726.5	36165.4	15414.8	351.9
DECAPOD LARVA	.0	.0	.0	17.3	138.1	232.8	.0	.0
EUPHAUSIDS*								
JUVENILES	45.4	246.1	166.6	322.8	138.1	24.8	158.3	176.8
EUPHAUSIA PACIFICA	5.7	17.2	5.7	144.1	.0	.0	.0	.0
THYSANOESSA SPINIFERA	.0	.0	.0	.0	.0	.0	.0	22.3
LARVACEANS*								
LARVACEANS	.0	.0	729.8	553.7	1425.6	12120.3	8408.3	1407.6
MEDUSAE*								
PHIALIDIUM SP.	.0	5.7	.0	.0	28.8	37.2	5.6	.0
AGLANTHA SP.	.0	.0	17.2	126.8	.0	.0	.0	.0
PROBOSCIDACTYLA SP.	.0	.0	11.5	.0	.0	.0	5.6	.0
OSTRACODS*								
CONCHOECIA SP.	.0	.0	1511.4	294.2	175.3	.0	.0	.0
SIPHONOPHORES*								
NECTOPHORES BRACTS	.0	.0	86.2	564.9	1337.0	24.8	118.7	27.9
COPEPODS*								
ACARTIA CLAUSII S6F	.0	.0	.0	.0	525.9	1759.4	1401.3	.0
ACARTIA LONGIREMIS <=S3/4	44.7	585.7	724.1	369.2	2805.1	5278.2	4204.0	527.9
ACARTIA LONGIREMIS <=S4/5	1207.0	4550.3	47790.5	2122.7	10168.3	12315.8	42040.4	3167.1
ACARTIA LONGIREMIS S6M	3620.9	11263.1	94132.8	2307.2	3681.6	2932.3	93890.1	1231.7
ACARTIA LONGIREMIS S								
CALANUS MARSHALLAE S3	670.5	487.3	187.1	.0	1960.6	2981.2	6304.0	527.9
CALANUS MARSHALLAE S4	759.9	487.3	6242.9	23.1	902.7	1776.2	1593.1	1583.6
CALANUS MARSHALLAE S5	938.8	841.7	2719.7	173.0	106.4	99.3	45.2	11085.0
CALANUS MARSHALLAE S6M	44.7	44.3	5.7	.0	.0	49.7	11.3	.0
CALANUS MARSHALLAE S6F	1028.1	177.2	23.0	.0	.0	124.1	5.6	7390.0
CALANUS PACIFICUS <=S5	.0	.0	187.1	236.5	.0	31.0	.0	5.6
CALANUS PACIFICUS S6M	.0	.0	5.7	5.8	.0	.0	5.6	.0
CALANUS PACIFICUS S6F	.0	.0	5.7	34.6	.0	.0	.0	176.0

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	17	19	21	23	24	27	31	35
CALANUS SP. S1/2	134.1	810.9	2172.3	92.3	2049.7	4887.2	5605.4	352.0
CALANUS TENUICORNIS <=S4	.0	.0	935.5	1384.3	.0	.0	.0	352.0
CALANUS TENUICORNIS S5	.0	.0	748.4	744.1	.0	.0	.0	176.0
CALANUS TENUICORNIS S6M	.0	.0	.0	92.3	.0	.0	5.6	192.7
CALANUS TENUICORNIS S6F	.0	.0	204.3	657.5	.0	.0	22.6	128.5
CENTROPAGES ABDOMINALIS <=S4	.0	.0	.0	.0	376.6	586.5	.0	.0
CENTROPAGES ABDOMINALIS S5	.0	.0	.0	.0	882.4	201.7	700.4	.0
CENTROPAGES ABDOMINALIS S6M	.0	.0	.0	.0	367.9	1014.7	.0	.0
CENTROPAGES ABDOMINALIS S6F	.0	.0	5.7	.0	603.9	1129.7	548.0	.0
EUCALANUS BUNGI S1/2	.0	5.7	.0	92.3	5.8	.0	.0	.0
EUCALANUS BUNGI S3	.0	.0	192.8	196.1	28.8	.0	17.0	16.8
EUCALANUS BUNGI S4	.0	5.7	28.7	28.8	11.5	12.4	11.3	16.8
EUCALANUS BUNGI S5M	.0	5.7	5.7	.0	.0	.0	.0	11.2
EUCALANUS BUNGI S5F	.0	11.5	11.5	17.3	.0	.0	5.6	.0
EUCALANUS BUNGI S6M	.0	.0	5.7	.0	.0	.0	.0	.0
EUCALANUS BUNGI S6F	22.7	57.2	17.2	86.5	.0	12.4	.0	5.6
EUCHAETA JAPONICA S1/2	.0	45.0	5.7	92.3	.0	.0	.0	176.0
EUCHAETA JAPONICA S3	.0	28.6	804.5	40.3	.0	.0	.0	176.0
EUCHAETA JAPONICA S4	.0	.0	.0	461.3	.0	.0	.0	.0
EUCHAETA JAPONICA S5M	.0	.0	.0	63.4	.0	.0	.0	.0
EUCHAETA JAPONICA S5F	.0	.0	.0	86.5	.0	.0	.0	.0
EUCHAETA JAPONICA S6M	.0	.0	.0	5.8	.0	.0	.0	.0
EUCHAETA JAPONICA S6F	.0	.0	.0	34.6	.0	.0	.0	.0
METRIDIA SP. <=S3	69.4	90.1	724.1	276.9	.0	391.0	.0	527.9
METRIDIA SP. S4	.0	276.0	2172.3	1015.2	.0	.0	1050.6	181.6
METRIDIA PACIFICA S5M	.0	181.7	775.8	2122.7	.0	.0	33.9	1304.3
METRIDIA PACIFICA S5F	.0	379.1	114.9	1015.2	.0	.0	33.9	100.6
METRIDIA PACIFICA S6M	.0	.0	741.3	.0	.0	.0	.0	203.9
METRIDIA PACIFICA S6F	.0	120.2	160.9	4337.6	17.3	24.8	28.3	248.6
NEOCALANUS CRISTATUS S2	.0	.0	.0	.0	.0	.0	5.6	.0
NEOCALANUS CRISTATUS S3	.0	.0	.0	.0	.0	.0	.0	5.6
NEOCALANUS CRISTATUS S4	.0	5.7	.0	.0	.0	.0	5.6	11.2
NEOCALANUS CRISTATUS S5	.0	22.9	34.5	196.0	.0	.0	5.6	5.6
NEOCALANUS PLUMCHRUS S4	.0	.0	.0	.0	.0	.0	11.3	.0
NEOCALANUS PLUMCHRUS S5	11.4	.0	.0	.0	.0	.0	.0	.0
OITHONA HELGOLANDICA	581.2	1666.9	32584.5	6921.7	4207.6	2541.4	9809.4	14780.0
OITHONA SPINIROSTRIS	89.4	2072.4	2172.3	3045.5	175.3	.0	1401.3	879.8
PARACALANUS SP. <=S4	.0	.0	.0	92.3	1051.9	1368.4	5605.4	.0
PARACALANUS SP. S5	44.7	45.0	1448.2	461.4	4207.6	9579.0	12612.1	1231.7
PARACALANUS SP. S6M	.0	45.0	1448.2	369.2	2805.1	2345.9	9645.5	176.0
PARACALANUS SP. S6F	.0	90.1	724.1	1292.0	5084.1	3909.8	13090.2	1583.6
PSEUDOCALANUS SP. <=S3	268.2	720.8	10137.4	.0	701.2	.0	1401.3	703.9
PSEUDOCALANUS SP. S4	1430.5	856.0	26791.7	1568.9	3506.3	782.1	36435.0	8797.6
PSEUDOCALANUS SP. S5M	1072.8	180.2	5792.8	1384.3	1227.2	782.1	25224.2	4750.7
PSEUDOCALANUS SP. S5F	1654.0	405.5	13033.8	461.4	1227.2	195.5	14013.5	2287.4
PSEUDOCALANUS SP. S6M	134.1	180.2	8689.2	276.9	525.9	.0	19618.8	4398.8
PSEUDOCALANUS SP. S6F	1430.5	540.7	23895.2	3968.4	1227.2	977.5	19618.8	23753.5
SCOLECITHRICELLA MINOR <=S4	.0	.0	.0	184.6	.0	.0	.0	.0
SCOLECITHRICELLA MINOR S5	89.4	135.1	11.5	461.4	175.3	.0	.0	527.9
SCOLECITHRICELLA MINOR S6M	.0	22.9	5.7	103.8	.0	195.5	5.6	198.3
SCOLECITHRICELLA MINOR S6F	106.4	434.8	28.7	657.5	.0	18.6	22.6	391.1

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 17 TO 35 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	17	19	21	23	24	27	31	35
AEGISTHUS SP.	.0	.0	5.7	11.5	.0	.0	.0	.0
AETIDEUS ARMATUS S6F	.0	.0	17.2	.0	.0	.0	.0	.0
AETIDEUS ARMATUS S5	.0	5.7	747.1	5.8	.0	.0	.0	.0
BARNACLE CYPRICS	5.7	.0	.0	.0	.0	.0	.0	.0
BIVALVE LARVA	.0	.0	.0	.0	701.2	.0	1401.3	.0
BRADYIDIUS SP. S5	.0	.0	5.7	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6M	.0	.0	.0	.0	.0	12.4	107.4	.0
CALANUS MARSHALLAE/PACIFICUS <=S5	.0	.0	.0	69.2	.0	195.5	.0	.0
CANDACIA BIPINNATA S5	.0	.0	.0	5.8	.0	.0	.0	.0
CANDACIA BIPINNATA S6M	.0	.0	.0	23.1	.0	.0	.0	.0
CANDACIA BIPINNATA S6F	.0	.0	.0	28.8	.0	.0	5.6	.0
CANDACIA COLUMBIAE S6F	.0	.0	.0	17.3	.0	.0	.0	.0
CANDACIA COLUMBIAE S6M	.0	.0	.0	11.5	.0	.0	.0	.0
CANDACIA COLUMBIAE S5	.0	.0	.0	11.5	.0	.0	.0	.0
CANDACIA SP. <=S4	.0	.0	.0	.0	.0	.0	.0	11.2
CLAUSOCALANUS SP. S6F	.0	.0	187.1	940.2	.0	.0	11.3	1133.9
CLAUSOCALANUS SP. S5	.0	.0	.0	2030.3	.0	.0	.0	2843.2
CORYCAEUS SP.	.0	.0	.0	.0	175.3	391.0	.0	.0
CUMACEA	.0	.0	.0	.0	.0	.0	5.6	.0
EPILABIDOCERA AMPHITRITE <=S4	.0	.0	.0	.0	175.3	.0	11.3	176.0
EPILABIDOCERA AMPHITRITE S6F	.0	.0	.0	.0	.0	.0	5.6	11.2
EPILABIDOCERA AMPHITRITE S6M	.0	.0	.0	.0	.0	6.2	.0	.0
EUCHAETA SP.	.0	.0	5.7	.0	.0	.0	.0	.0
EUCHIRELLA SP. <=S4	.0	.0	.0	.0	2103.8	2345.9	4204.0	.0
EVADNE SP.	.0	.0	11.5	.0	.0	18.6	5.6	.0
FISH EGGS	.0	.0	.0	.0	350.6	.0	.0	.0
GAETANUS SP. S6F	.0	.0	.0	17.3	.0	.0	.0	.0
GAETANUS SP. S6M	.0	.0	.0	421.0	.0	.0	.0	.0
GAIDIUS COLUMBIAE S5	.0	.0	.0	17.3	.0	.0	.0	.0
GAIDIUS VARIABLIS S6F	.0	.0	.0	40.3	.0	.0	.0	.0
GAIDIUS VARIABLIS S6M	.0	.0	.0	17.3	.0	.0	.0	.0
HETERORHABDUS SP. <=S4	.0	.0	11.5	.0	.0	.0	.0	.0
HETERORHABDUS TANNERI S6F	.0	.0	11.5	.0	.0	.0	.0	.0
HYPERIA SP.	.0	.0	.0	461.4	.0	.0	.0	.0
LUCICUTIA SP. <=S4	.0	.0	.0	109.6	.0	.0	.0	.0
LUCICUTIA SP. S5	.0	.0	.0	98.0	.0	.0	.0	5.6
METRIDIA OKHOTENSIS S6F	.0	.0	.0	92.3	.0	.0	.0	.0
MICROCALANUS SP. S5	.0	45.0	.0	.0	.0	.0	.0	.0
MYSID	.0	.0	.0	17.3	.0	.0	.0	.0
NATANTIA	.0	.0	.0	92.3	.0	.0	.0	.0
NEMATOSCELIS SP.	.0	.0	.0	.0	5.8	.0	.0	.0
ONCAEA SP.	.0	.0	.0	40.3	.0	.0	.0	.0
PLEUROMAMMA SCUTULLATA S5	.0	.0	.0	.0	2629.8	6646.6	.0	.0
PLEUROMAMMA SCUTULLATA <=S4	.0	.0	.0	.0	1238.7	220.3	22.6	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 17 TO 35
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	17	19	21	23	24	27	31	35
PODON SP.	.0	.0	5.7	11.5	.0	.0	.0	.0
POLYCHAETE LARVAE	.0	11.5	798.8	149.9	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS S6F	.0	90.1	.0	.0	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS <=S4	.0	17.2	23.0	51.9	.0	.0	.0	5.6
RADIOLARIA	.0	.0	.0	23.1	.0	.0	.0	.0
SARSIA SP.	.0	5.7	.0	.0	.0	.0	.0	.0
SCAPHOCALANUS SP. S6F	.0	.0	5.7	.0	.0	.0	.0	.0
SCAPHOCALANUS SP. S6M	.0	.0	.0	92.3	.0	.0	.0	.0
SCAPHOCALANUS SP. S5	.0	.0	.0	23.1	.0	.0	.0	.0
SCAPHOCALANUS SP. <=S4	.0	.0	.0	17.3	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S6F	.0	.0	11.5	126.9	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S5	.0	.0	.0	115.3	.0	.0	.0	.0
SCINA SP.	.0	.0	5.7	5.8	.0	.0	.0	5.6
SPINOCALANUS BREVICAUDATUS S6F	.0	.0	5.7	.0	.0	.0	.0	.0
THYSANOESSA LONGIPES	.0	.0	17.2	46.1	.0	.0	.0	.0
UNDINELLA SP.	.0	.0	.0	1026.7	525.9	.0	.0	527.9
UNIDENTIFIED CHAETOGNATHS	.0	.0	.0	5.8	350.6	12.4	.0	.0
UNIDENTIFIED MEDUSAE	.0	.0	.0	.0	.0	.0	.0	22.3
LIMACINA SP.	.0	45.0	2189.5	380.7	350.6	195.5	33.9	176.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 37 TO 51

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	37	38	41	45	47	51
AMPHIPODS*						
UNIDENTIFIED JUVENILES	90.9	194.5	.0	.0	.0	.0
PARATHEMISTO SP.	245.8	67.0	5.6	22.4	5.2	17.4
EUPRIMNO SP.	5.6	5.6	.0	.0	.0	.0
LYPHOCARIS SP.	.0	27.9	.0	.0	.0	.0
CHAETOGNATHS*						
UNIDENTIFIED JUVENILES	1010.9	22.3	.0	33.6	.0	104.6
SAGITTA ELEGANS	351.9	27.9	156.4	22.4	24.7	69.7
EUKROHNIA HAMATA	636.8	729.8	.0	.0	.0	.0
CTENOPHORES*						
PLEUROBRACHIA SP.	.0	16.8	.0	5.6	1396.6	23.2
EGGS LARVA*						
UNIDENTIFIED EGGS.	45.5	.0	.0	.0	.0	.0
COPEPOD NAUPLII	.0	583.5	.0	.0	.0	.0
BARNACLE NAUPLII	.0	.0	.0	.0	21741.3	732.4
EUPHAUSID LARVA	409.2	1750.4	.0	5.6	19325.6	203.4
DECAPOD LARVA	.0	.0	.0	50.4	1114.2	46.5
EUPHAUSIDS*						
JUVENILES	351.9	139.7	50.3	95.1	927.0	17.4
EUPHAUSIA PACIFICA	50.3	217.9	.0	.0	.0	.0
THYSANOESSA SPINIFERA	5.6	.0	.0	.0	.0	.0
LARVACEANS*						
LARVACEANS	147.6	6612.7	8857.4	3297.7	6441.9	.0
MEDUSAE*						
PHIALIDIUM SP.	.0	.0	.0	.0	18.5	5.8
AGLANTHA SP.	308.0	345.3	11.2	.0	.0	.0
PROBOSCIDACTYLA SP.	.0	5.6	11.2	5.6	.0	.0
OSTRACODS*						
CONCHOECIA SP.	329.4	1756.0	.0	.0	.0	.0
SIPHONOPHORES*						
NECTOPHORES BRACTS	84.6	117.3	22.3	.0	8985.5	.0
COPEPODS*						
ACARTIA CLAUSII <=S5	.0	.0	.0	.0	2415.7	.0
ACARTIA CLAUSII S6M	.0	.0	.0	.0	805.2	.0
ACARTIA CLAUSII S6F	.0	.0	.0	.0	1610.4	.0
ACARTIA LONGIREMIS <=S3/4	181.8	389.0	2723.6	659.5	1610.4	.0
ACARTIA LONGIREMIS <=S4/5	1045.6	2139.4	4085.5	11871.8	24962.1	13915.9
ACARTIA LONGIREMIS S6M	409.2	2528.4	36769.3	59359.0	39456.3	35888.4
ACARTIA LONGIREMIS S						
CALANUS MARSHALLAE S3	45.5	286.9	352.0	5624.2	4353.3	1514.1
CALANUS MARSHALLAE S4	591.0	382.5	4069.2	8010.2	890.4	7002.7
CALANUS MARSHALLAE S5	2149.8	686.1	3703.4	681.7	18.5	6056.4
CALANUS MARSHALLAE S6M	.0	5.6	187.1	5.6	.0	189.2
CALANUS MARSHALLAE S6F	736.2	399.2	89.4	368.8	12.4	189.2

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 37 TO 51

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	37	38	41	45	47	51
CALANUS PACIFICUS <=S6	142.0	669.3	.0	.0	98.9	.0
CALANUS PACIFICUS S6M	.0	191.2	.0	5.6	.0	.0
CALANUS PACIFICUS S6F	96.9	292.5	5.6	.0	.0	.0
CALANUS SP. S1/2	90.9	194.5	.0	.0	16514.6	.0
CALANUS TENUICORNIS <=S4	1000.2	1147.4	2723.6	.0	.0	.0
CALANUS TENUICORNIS S5	653.2	1844.7	660.9	.0	.0	.0
CALANUS TENUICORNIS S6M	62.2	27.9	.0	.0	.0	.0
CALANUS TENUICORNIS S6F	163.6	269.4	16.8	.0	.0	.0
CENTROPAGES ABDOMINALIS <=S4	.0	389.0	.0	.0	805.2	.0
CENTROPAGES ABDOMINALIS S5	.0	1361.4	.0	659.5	4831.4	.0
CENTROPAGES ABDOMINALIS S6M	.0	389.0	.0	.0	1610.4	.0
CENTROPAGES ABDOMINALIS S6F	.0	.0	.0	11.2	2415.7	.0
EUCALANUS BUNGI S1/2	.0	.0	.0	.0	6.2	.0
EUCALANUS BUNGI S3	55.9	95.6	16.8	.0	111.2	17.4
EUCALANUS BUNGI S4	50.3	50.3	.0	.0	105.1	17.4
EUCALANUS BUNGI S5M	5.6	50.3	.0	.0	.0	.0
EUCALANUS BUNGI S5F	5.6	22.3	.0	.0	6.2	5.8
EUCALANUS BUNGI S6M	5.6	.0	.0	.0	.0	.0
EUCALANUS BUNGI S6F	72.6	78.2	11.2	.0	.0	23.2
EUCHAETA JAPONICA S1/2	16.8	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S3	50.3	33.5	.0	.0	.0	.0
EUCHAETA JAPONICA S4	.0	167.6	.0	.0	.0	5.8
EUCHAETA JAPONICA S5M	.0	55.9	.0	.0	.0	.0
EUCHAETA JAPONICA S5F	.0	61.4	.0	.0	.0	5.8
EUCHAETA JAPONICA S6M	.0	11.2	.0	.0	.0	.0
EUCHAETA JAPONICA S6F	.0	39.1	.0	.0	.0	.0
METRIDIA SP. <=S3	454.7	972.5	1361.8	.0	.0	2929.7
METRIDIA SP. S4	681.9	778.0	2042.7	659.5	.0	3662.1
METRIDIA PACIFICA S5M	732.2	1147.4	78.2	.0	.0	2046.0
METRIDIA PACIFICA S5F	769.8	286.9	111.7	.0	.0	802.2
METRIDIA PACIFICA S6M	.0	.0	33.5	.0	.0	738.2
METRIDIA PACIFICA S6F	79.0	1625.5	78.2	.0	.0	46.5
NEOCALANUS CRISTATUS S3	11.2	.0	.0	.0	.0	5.8
NEOCALANUS CRISTATUS S4	61.4	72.6	5.6	.0	.0	11.6
NEOCALANUS CRISTATUS S5	206.7	664.8	5.6	.0	.0	.0
NEOCALANUS PLUMCHRUS S4	.0	5.6	.0	.0	.0	.0
OITHONA HELGOLANDICA	3182.4	9335.6	17703.7	31658.1	17715.1	12451.1
OITHONA SPINIROSTRIS	2597.0	1750.4	.0	.0	805.2	1464.8
PARACALANUS SP. <=S4	.0	.0	.0	.0	3220.9	.0
PARACALANUS SP. S5	90.9	972.5	1361.8	.0	12883.7	2197.3
PARACALANUS SP. S6M	45.5	583.5	.0	.0	12078.5	.0
PARACALANUS SP. S6F	45.5	2917.4	.0	3297.7	29793.6	1464.8
PSEUDOCALANUS SP. <=S5	.0	194.5	8171.0	11871.8	19325.5	8789.0
PSEUDOCALANUS SP. S4	863.8	4862.3	23151.0	27041.3	1610.4	16113.2

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.		37	38	41	45	47	51
PSEUDOCALANUS SP.	S5M	90.9	1166.9	12937.3	22424.5	5636.6	8789.0
PSEUDOCALANUS SP.	S5F	.0	194.5	16341.9	21765.0	11273.2	11718.6
PSEUDOCALANUS SP.	S6M	227.3	194.5	15661.0	30998.6	5636.6	25634.6
PSEUDOCALANUS SP.	S6F	1771.1	6612.7	50387.5	49465.9	12863.7	128905.3
SCOLECITHRICELLA MINOR	<=S4	.0	194.5	.0	.0	.0	732.4
SCOLECITHRICELLA MINOR	S5	278.3	194.5	.0	.0	.0	732.4
SCOLECITHRICELLA MINOR	S6M	118.9	194.5	.0	.0	.0	.0
SCOLECITHRICELLA MINOR	S6F	399.7	394.6	5.6	.0	.0	29.1

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 37 TO 51

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	37	38	41	45	47	51
AETIDEUS ARMATUS S6F	5.6	33.5	.0	.0	.0	.0
BARNACLE CYPRIDS	45.5	.0	.0	.0	1610.4	5.8
BIVALVE LARVA	.0	194.5	.0	.0	.0	.0
BRADYIDIUS SP. <=S4	11.2	.0	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6M	.0	.0	.0	28.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6F	.0	.0	.0	5.6	6.2	.0
CANDACIA BIPINNATA S5	163.6	5.6	.0	.0	.0	.0
CANDACIA BIPINNATA S6M	73.4	16.8	.0	.0	.0	.0
CANDACIA BIPINNATA S6F	39.1	67.0	.0	.0	.0	.0
CANDACIA COLUMBIAE S6F	.0	22.3	.0	.0	.0	.0
CANDACIA COLUMBIAE S6M	.0	22.3	.0	.0	.0	.0
CANDACIA SP. <=S4	306.3	400.2	5.6	.0	.0	.0
CLAUSOCALANUS SP. S6F	345.4	1784.0	.0	.0	805.2	.0
CLAUSOCALANUS SP. S6M	.0	778.0	.0	.0	.0	.0
CLAUSOCALANUS SP. S5	863.8	6612.7	.0	.0	805.2	.0
CLAUSOCALANUS SP. <=S4	272.8	583.5	.0	.0	.0	.0
CLIONE SP.	5.6	33.5	.0	.0	.0	.0
EPILABIDOCERA SP. <=S4	.0	.0	.0	.0	6.2	.0
EPILABIDOCERA AMPHITRITE S6F	.0	.0	.0	.0	6.2	.0
EPILABIDOCERA AMPHITRITE S6M	.0	.0	.0	.0	.0	5.8
EPILABIDOCERA AMPHITRITE S5	.0	194.5	.0	.0	.0	.0
EUCHIRELLA SP. <=S4	.0	33.5	.0	.0	.0	.0
EVADNE SP.	5.6	.0	.0	.0	2415.7	.0
FISH LARVAE	.0	5.6	5.6	.0	.0	.0
GAETANUS SP. S6F	.0	22.3	.0	.0	.0	.0
GAETANUS SP. S6M	45.5	.0	.0	.0	.0	.0
GAETANUS SP. S5	.0	11.2	.0	.0	.0	.0
GAIDIUS VARIABLIS S6F	.0	16.8	.0	.0	.0	.0
GAIDIUS VARIABLIS S5	.0	16.8	.0	.0	.0	.0
GAIDIUS VARIABLIS <=S4	.0	194.5	.0	.0	.0	.0
HETERORHABDUS SP. S6F	.0	44.7	.0	.0	.0	.0
HETERORHABDUS SP. S6M	.0	22.3	5.6	.0	.0	.0
HETERORHABDUS SP. S5	.0	22.3	.0	.0	.0	.0
HETERORHABDUS SP. <=S4	.0	5.6	.0	.0	.0	.0
HETERORHABDUS TANNERI S6F	5.6	.0	.0	.0	.0	.0
HYPERIA SP.	90.9	.0	.0	.0	.0	.0
LUCICUTIA SP. <=S4	33.5	.0	.0	.0	.0	.0
LUCICUTIA SP. S5	.0	573.7	.0	.0	.0	.0
LUCICUTIA SP. S6M	.0	298.0	.0	.0	.0	.0
LUCICUTIA SP. S6F	.0	292.5	.0	.0	.0	.0
METRIDIA OKHOTENSIS S6F	45.5	.0	.0	.0	.0	.0
PLEUROMAMMA SP.	.0	22.3	.0	.0	.0	.0
PLEUROMAMMA SCUTULLATA S5	.0	5.6	.0	.0	.0	.0
PLEUROMAMMA SCUTULLATA <=S4	.0	5.6	.0	.0	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 37 TO 51

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	37	38	41	45	47	51
PODON SP.	27.9	.0	.0	.0	2415.7	.0
POLYCHAETE LARVAE	135.6	.0	.0	.0	3319.8	.0
RACOVITZANUS ANTARCTICUS S6F	5.6	.0	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS S5	50.9	33.5	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS <=S4	100.6	5.6	.0	.0	.0	.0
RADIOLARIA	191.5	.0	.0	.0	.0	.0
SAGITTA SCRIPPSAE	.0	150.8	.0	.0	.0	.0
SALP	.0	22.3	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S6F	.0	61.4	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S5	.0	11.2	.0	.0	.0	.0
SIPHONOPHORE PLANULA	.0	5.6	.0	.0	.0	.0
TESSARABRACHION OCULATUS	.0	55.9	.0	.0	.0	.0
THYSANOESSA LONGIPES	16.8	5.6	.0	.0	.0	.0
TOMOPTERIS SEPTENTRIONALIS	.0	83.8	.0	.0	.0	.0
UNDINELLA SP.	500.1	.0	.0	.0	.0	.0
UNIDENTIFIED COPEPODITES	.0	1166.9	680.9	.0	.0	.0
UNIDENTIFIED CHAETOGNATHS	5.6	.0	.0	.0	.0	.0
UNIDENTIFIED EUPHASID	.0	11.2	.0	.0	.0	.0
UNIDENTIFIED MEDUSAE	196.3	.0	5.6	.0	12.4	.0
UNIDENTIFIED PTEROPOD	.0	44.7	.0	.0	.0	.0
LIMACINA SP.	409.2	411.3	33.5	670.7	1610.4	5.8

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 54 TO 69

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	54	55	59	63	67	69
AMPHIPODS*	.0	.0	.0	.0	191.1	.0
UNIDENTIFIED JUVENILES	29.0	.0	18.0	36.2	11.7	39.1
PARATHEMISTO SP.	5.8	.0	.0	.0	.0	.0
EUPRIMNO SP.	40.6	.0	.0	.0	.0	.0
CYPHOCARIS SP.						
CHAETOGNATHS*	23.2	43.7	113.9	36.2	93.9	33.5
UNIDENTIFIED JUVENILES	87.0	5.5	.0	30.2	909.9	.0
SAGITTA ELEGANS	1073.3	.0	.0	.0	17.6	.0
EUKROHNIA HAMATA						
CTENOPHORES*	.0	535.2	.0	.0	.0	.0
PLEUROBRACHIA SP.						
EGGS LARVA*	2384.1	.0	1643.3	.0	382.3	11845.2
UNIDENTIFIED EGGS.	397.4	.0	730.3	.0	.0	.0
COPEPOD NAUPLII	.0	5757.8	547.7	.0	.0	86.4
BARNACLE NAUPLII	1589.4	26784.4	29408.0	60.4	382.3	616.4
EUPHAUSID LARVA	5.8	251.2	6.0	.0	.0	5.6
DECAPOD LARVA						
EUPHAUSIDS*	423.5	27.3	.0	66.5	228.9	.0
JUVENILES	23.2	.0	.0	.0	.0	5.6
EUPHAUSIA PACIFICA						
LARVACEANS*	2781.4	9499.9	2203.0	12275.5	1923.4	.0
LARVACEANS						
MEDUSAE*	.0	43.7	24.0	.0	.0	.0
PHIALIDIUM SP.	23.2	.0	.0	6.0	70.4	.0
AGLANTHA SP.	.0	16.4	.0	6.0	.0	.0
PROBOSCIDACTYLA SP.						
OSTRACODS*	1986.7	.0	.0	.0	.0	.0
CONCHOECIA SP.						
SIPHONOPHORES*	52.2	638.8	.0	832.1	17.6	5.6
NECTOPHORES BRACTS						
COPEPODS*	.0	1354.8	547.7	.0	.0	.0
ACARTIA CLAUSII <=S5	.0	1354.8	547.7	.0	.0	.0
ACARTIA CLAUSII S6M	.0	4741.7	547.7	.0	.0	86.4
ACARTIA CLAUSII S6F	397.4	508.0	1825.8	8139.4	191.1	518.8
ACARTIA LONGIREMIS <=S3/4	10330.9	6096.6	5660.1	16278.7	3249.8	2853.2
ACARTIA LONGIREMIS <=S4/5	20264.6	3725.7	4929.8	41510.8	5161.5	1556.3
ACARTIA LONGIREMIS S6M						
ACARTIA LONGIREMIS S	672.3	1946.9	3834.2	2200.2	573.5	3112.6
CALANUS MARSHALLAE S3	2113.0	684.0	4382.0	8200.7	573.5	1469.9
CALANUS MARSHALLAE S4	864.4	114.6	1763.5	2600.2	7646.7	517.4
CALANUS MARSHALLAE S5	.0	.0	92.8	.0	191.1	27.2
CALANUS MARSHALLAE S6M	96.0	27.3	649.7	200.0	3823.4	274.1
CALANUS MARSHALLAE S6F	1632.7	84.7	.0	.0	764.7	.0
CALANUS PACIFICUS <=S5						

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 54 TO 69
(VALUES ARE NUMBER OF ORGANISMS/54. METER)

STATION I.D.	54	55	59	63	67	69
CALANUS PACIFICUS S6M	96.2	.0	.0	.0	.0	.0
CALANUS PACIFICUS S6F	.0	.0	.0	100.0	.0	.0
CALANUS SP. S1/2	397.4	5588.5	3103.9	814.0	.0	1556.3
CALANUS TENUICORNIS <=S4	268.1	.0	.0	814.0	2294.0	.0
CALANUS TENUICORNIS S5	768.3	.0	.0	1633.9	573.5	.0
CALANUS TENUICORNIS S6M	107.6	.0	.0	18.1	197.0	.0
CALANUS TENUICORNIS S6F	96.0	.0	.0	139.0	1361.6	.0
CENTROPAGES ABDOMINALIS <=S4	.0	846.7	.0	.0	.0	.0
CENTROPAGES ABDOMINALIS S5	.0	1016.1	182.6	.0	191.1	.0
CENTROPAGES ABDOMINALIS S6M	.0	846.7	.0	.0	.0	259.4
CENTROPAGES ABDOMINALIS S6F	5.8	2660.3	401.1	.0	.0	178.5
EUCALANUS BUNGI S1/2	403.2	.0	.0	.0	.0	.0
EUCALANUS BUNGI S3	17.4	5.5	.0	.0	.0	.0
EUCALANUS BUNGI S4	29.0	5.5	.0	12.1	35.2	5.6
EUCALANUS BUNGI S5M	5.8	.0	.0	6.0	17.6	5.6
EUCALANUS BUNGI S5F	11.6	5.5	.0	.0	5.9	.0
EUCALANUS BUNGI S6F	17.4	.0	.0	6.0	11.7	.0
EUCHAETA JAPONICA S3	40.6	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S4	81.2	.0	.0	.0	5.9	.0
EUCHAETA JAPONICA S5M	29.0	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S5F	40.6	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S6M	5.8	.0	.0	.0	.0	.0
EUCHAETA JAPONICA S6F	40.6	.0	.0	.0	.0	.0
METRIDIA SP. <=S3	1589.4	338.7	.0	2441.8	382.3	.0
METRIDIA SP. S4	3178.7	.0	182.6	814.0	.0	.0
METRIDIA PACIFICA S5M	3125.6	.0	.0	54.4	764.7	.0
METRIDIA PACIFICA S5F	1367.4	.0	6.0	54.4	394.1	86.4
METRIDIA PACIFICA S6M	.0	.0	.0	.0	382.3	.0
METRIDIA PACIFICA S6F	781.4	5.5	18.0	54.4	226.4	16.7
NEOCALANUS CRISTATUS S3	17.4	.0	.0	24.2	.0	.0
NEOCALANUS CRISTATUS S4	58.0	.0	.0	6.0	11.7	.0
NEOCALANUS CRISTATUS S5	92.8	.0	.0	.0	11.7	16.7
OITHONA HELGOLANOICA	28608.8	1524.1	1460.7	55347.7	12999.4	605.2
OITHONA SPINIROSTRIS	4370.8	.0	182.6	814.0	1720.5	172.9
PARACALANUS SP. <=S4	397.4	2032.2	2556.1	814.0	.0	.0
PARACALANUS SP. S5	1192.0	7451.3	3651.7	2441.8	3058.7	86.4
PARACALANUS SP. S6M	397.4	4064.4	1825.8	814.0	955.8	.0
PARACALANUS SP. S6F	794.7	11346.4	1825.8	4069.7	2676.4	518.7
PSEUDOCALANUS SP. <=S3	4370.8	1354.8	1643.3	3255.7	191.1	86.4
PSEUDOCALANUS SP. S4	16291.1	2201.5	2008.4	16278.7	3058.7	345.9
PSEUDOCALANUS SP. S5M	3973.4	508.0	365.2	20348.4	955.8	86.4
PSEUDOCALANUS SP. S5F	3178.7	1693.5	912.9	18720.6	1147.0	518.8
PSEUDOCALANUS SP. S6M	8344.2	508.0	1278.1	29301.8	1147.0	1383.4
PSEUDOCALANUS SP. S6F	34568.9	1693.5	10772.4	92788.9	6690.9	7089.9
SCOLECITHRICELLA MINOR <=S4	794.7	.0	.0	.0	191.1	.0
SCOLECITHRICELLA MINOR S5	800.5	.0	.0	.0	394.1	.0
SCOLECITHRICELLA MINOR S6M	5.8	.0	.0	.0	191.1	.0
SCOLECITHRICELLA MINOR S6F	414.8	.0	12.0	.0	5.9	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 54 TO 69

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	54	55	59	63	67	69
AETIDEUS ARMATUS S5	23.2	.0	.0	.0	.0	.0
AETIDEUS ARMATUS <=S4	17.4	.0	.0	.0	.0	.0
BARNACLE CYPRIDS	.0	1354.8	.0	.0	382.3	86.4
BIVALVE LARVA	.0	338.7	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6M	96.0	21.8	.0	.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS S6F	480.2	10.9	.0	100.0	.0	.0
CALANUS MARSHALLAE/PACIFICUS <=S5	96.0	84.7	.0	.0	.0	.0
CANDACIA BIPINNATA S5	5.8	.0	.0	.0	11.7	.0
CANDACIA BIPINNATA S6F	.0	.0	.0	.0	5.9	.0
CANDACIA SP. <=S4	.0	.0	.0	.0	197.0	.0
CLAUSOCALANUS SP. S6F	5.8	.0	.0	862.3	2555.6	11.2
CLAUSOCALANUS SP. S6M	.0	.0	.0	.0	382.3	.0
CLAUSOCALANUS SP. S5	5.8	.0	.0	814.0	1720.5	86.4
CLIONE SP.	23.2	.0	.0	.0	.0	.0
CORYCAEUS SP.	.0	169.3	182.6	.0	.0	.0
EPILABIDOCERA AMPHITRITE S5	.0	.0	182.6	.0	.0	.0
EUCHIRELLA SP. <=S4	17.4	.0	.0	.0	.0	.0
EVADNE SP.	.0	1862.9	730.3	814.0	191.1	.0
FISH LARVAE	.0	.0	18.0	.0	.0	5.6
GAIDIUS COLUMBIAE S6F	17.4	.0	.0	.0	.0	.0
GAIDIUS COLUMBIAE S5	5.8	.0	.0	.0	.0	.0
GAIDIUS VARIABLIS S6F	11.6	.0	.0	.0	.0	.0
GAIDIUS VARIABLIS S5	40.6	.0	.0	.0	.0	.0
GAIDIUS VARIABLIS <=S4	5.8	.0	.0	.0	.0	.0
HETERORHABDUS SP. S6F	17.4	.0	.0	.0	.0	.0
HETERORHABDUS SP. S6M	17.4	.0	.0	.0	.0	.0
HETERORHABDUS SP. S5	11.6	.0	.0	.0	.0	.0
HETERORHABDUS SP. <=S4	403.2	.0	.0	.0	.0	.0
LUCICUTIA SP. S6M	5.8	.0	.0	.0	.0	.0
LUCICUTIA SP. S6F	403.2	.0	.0	.0	.0	.0
MICROCALANUS SP. S6F	.0	.0	.0	.0	191.1	.0
PLEUROMAMMA SCUTULLATA S6F	5.8	.0	.0	.0	.0	.0
PLEUROMAMMA SCUTULLATA S6M	5.8	.0	.0	.0	.0	.0
PODON SP.	.0	6435.2	2008.4	.0	.0	.0
POLYCHAETE LARVAE	.0	1212.7	.0	.0	.0	86.4
RACOVITZANUS ANTARCTICUS S6F	17.4	.0	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS S5	1290.7	.0	.0	.0	.0	.0
RACOVITZANUS ANTARCTICUS <=S4	5.8	.0	.0	.0	.0	.0
SAGITTA SCRIPPSAE	52.2	.0	.0	.0	5.9	.0
SCAPHOCALANUS BREVICORNIS S6F	23.2	.0	.0	.0	.0	.0
SCAPHOCALANUS BREVICORNIS S5	5.8	.0	.0	.0	.0	.0
TESSARABRACHION OCULATUS	5.8	.0	.0	.0	.0	.0
TOMOPTERIS SEPTENTRIONALIS	23.2	.0	.0	.0	.0	.0
UNIDENTIFIED COPEPODITES	.0	338.7	547.7	.0	.0	86.4
UNIDENTIFIED PTEROPOD	.0	.0	.0	.0	47.0	.0
LIMACINA SP.	1142.0	693.8	.0	6.0	573.5	189.7

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS A TO Y

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	A	I	G1	G2	Y
AMPHIPODS*					
PARATHEMISTO SP.	5.6	109.6	5.6	5.6	178.6
CHAETOGNATHS*					
UNIDENTIFIED JUVENILES	.0	38.1	292.5	27.9	16.7
CTENOPHORES*					
PLEUROBRACHIA SP.	424.5	103.5	636.9	502.6	33.5
EGGS LARVA*					
UNIDENTIFIED EGGS.	178.8	279.7	.0	.0	.0
COPEPOD NAUPLII	1967.1	93.2	191.2	715.5	715.3
BARNACLE NAUPLII	625.9	466.2	2868.6	12163.1	804.7
EUPHAUSID LARVA	19850.0	6465.7	16255.5	40497.0	9030.9
DECAPOD LARVA	11.2	32.7	27.9	39.1	89.4
EUPHAUSIDS*					
JUVENILES	.0	.0	22.3	.0	.0
LARVACEANS*					
LARVACEANS	8762.7	2051.1	6789.0	10374.4	1251.8
MEDUSAE*					
PHIALIDIUM SP.	72.6	43.6	78.2	50.3	11.2
AGLANTHA SP.	.0	5.4	.0	.0	.0
PROBOSCIDACTYLA SP.	.0	.0	16.8	.0	.0
OSTRACODS*					
CONCHOECIA SP.	89.4	.0	.0	.0	.0
SIPHONOPHORES*					
NECTOPHORES BRACTS	106.2	5.4	50.3	106.1	27.9
COPEPODS*					
ACARTIA CLAUSII <=S5	89.4	466.2	669.3	1431.0	268.2
ACARTIA CLAUSII S6M	.0	372.9	286.9	1788.7	447.1
ACARTIA CLAUSII S6F	894.1	1771.4	956.2	4292.9	715.3
ACARTIA LONGIREMIS <=S3/4	1073.0	839.1	669.3	1788.7	447.1
ACARTIA LONGIREMIS <=S4/5	5007.2	3636.1	3824.8	11447.6	2327.8
ACARTIA LONGIREMIS S6M	2593.0	2890.2	1147.4	5008.3	1520.0
ACARTIA LONGIREMIS S					
CALANUS MARSHALLAE S3	1520.0	1054.2	531.6	1966.9	1005.6
CALANUS MARSHALLAE S4	1251.8	472.4	471.1	575.5	379.9
CALANUS MARSHALLAE S5	458.2	389.0	111.7	217.8	139.6
CALANUS MARSHALLAE S6M	.0	10.9	5.6	5.6	.0
CALANUS MARSHALLAE S6F	145.2	125.3	61.4	134.0	83.8
CALANUS PACIFICUS <=S5	95.0	93.2	46.2	357.7	.0
CALANUS SP. S1/2	1609.5	1212.0	1147.4	5723.8	2861.3
CALANUS TENUICORNIS S5	.0	.0	.0	.0	44.7
CALANUS TENUICORNIS S6M	5.6	.0	23.1	.0	22.3
CALANUS TENUICORNIS S6F	.0	.0	11.2	.0	44.7
CENTROPAGES ABDOMINALIS <=S4	.0	279.7	95.6	1073.2	357.7
CENTROPAGES ABDOMINALIS S5	447.1	751.3	.0	1431.0	625.9

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS A TO Y
(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	A	I	Q1	Q2	Y
CENTROPAGES ABDOMINALIS S6M	.0	668.9	95.6	.0	279.4
CENTROPAGES ABDOMINALIS S6F	89.4	837.2	83.8	402.4	89.4
EUCALANUS BUNGI S1/2	.0	.0	.0	.0	5.6
EUCALANUS BUNGI S4	.0	.0	.0	11.2	.0
EUCALANUS BUNGI S5M	5.6	.0	.0	.0	.0
EUCALANUS BUNGI S6F	.0	.0	.0	5.6	.0
METRIDIA SP. <=S3	268.2	.0	.0	357.7	178.8
METRIDIA SP. S4	89.4	.0	.0	.0	179.1
METRIDIA PACIFICA S5M	16.7	21.8	.0	.0	5.6
METRIDIA PACIFICA S5F	16.7	5.4	.0	.0	11.2
METRIDIA PACIFICA S6M	5.6	.0	.0	.0	.0
METRIDIA PACIFICA S6F	16.7	5.4	16.8	22.3	27.9
OITHONA HELGOLANDICA	894.1	652.6	669.3	3935.1	625.9
OITHONA SPINIROSTRIS	625.9	.0	.0	.0	.0
PARACALANUS SP. <=S4	536.5	932.3	1051.8	3219.7	715.3
PARACALANUS SP. S5	3487.2	3915.7	4398.5	16456.0	4470.7
PARACALANUS SP. S6M	1788.3	1957.9	1721.2	5723.8	2056.6
PARACALANUS SP. S6F	3040.1	4009.0	2486.1	17171.4	3129.5
PSEUDOCALANUS SP. <=S3	268.2	279.7	286.9	1788.7	268.2
PSEUDOCALANUS SP. S4	536.5	279.7	573.7	4292.9	268.2
PSEUDOCALANUS SP. S5M	.0	372.9	.0	715.5	357.7
PSEUDOCALANUS SP. S5F	178.8	372.9	191.2	1073.2	625.9
PSEUDOCALANUS SP. S6M	1162.4	466.2	95.6	.0	268.2
PSEUDOCALANUS SP. S6F	2324.8	3721.9	191.2	4292.9	2861.3
SCOLECITHRICELLA MINOR <=S4	.0	.0	.0	357.7	.0
SCOLECITHRICELLA MINOR S6F	178.8	.0	.0	.0	.0

ZOOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS A TO Y

(VALUES ARE NUMBER OF ORGANISMS/SQ. METER)

STATION I.D.	A	I	G1	G2	Y
BARNACLE CYPRIS	357.7	.0	95.6	1073.2	268.2
BIVALVE LARVA	178.8	.0	1338.7	4650.6	.0
CALANUS MARSHALLAE/PACIFICUS S6M	.0	21.8	.0	11.2	16.7
CALANUS MARSHALLAE/PACIFICUS S6F	.0	5.4	23.1	22.3	.0
CALANUS MARSHALLAE/PACIFICUS <=S5	.0	466.2	23.1	.0	22.3
CORYCAEUS SP.	357.7	466.2	.0	357.7	.0
CUMACEA	.0	.0	16.8	61.4	.0
ECHINOPLUTEUS LARVAE	268.2	.0	573.7	357.7	.0
EPILABIDOCERA AMPHITRITE <=S4	95.0	.0	.0	.0	11.2
EPILABIDOCERA AMPHITRITE S6F	111.7	.0	.0	.0	5.6
EPILABIDOCERA AMPHITRITE S6M	16.7	.0	.0	5.6	.0
EPILABIDOCERA AMPHITRITE S5	5.6	.0	.0	.0	5.6
EVADNE SP.	1520.0	1228.4	1051.8	5366.1	1698.9
FISH LARVAE	5.6	.0	.0	.0	5.6
MYSID	.0	.0	11.2	27.9	.0
ONCAEA SP.	.0	.0	.0	.0	89.4
PODON SP.	715.3	2703.7	765.0	3219.7	1162.4
POLYCHAETE LARVAE	933.2	937.8	1934.7	2152.0	357.7
UNIDENTIFIED COPEPODITES	.0	.0	286.9	715.5	.0
UNIDENTIFIED MEDUSAE	5.6	.0	22.3	5.6	.0
LIMACINA SP.	195.6	5.4	309.2	357.7	178.8

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 2 TO 9 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	2	3	4	5	6	7	8	9
CENTRIC DIATOMS:								
BACTERIASTRUM DELICATULA			.14					
CHAETOCEROS SPP. (SINGLE CELL)						20.42		.60
CHAETOCEROS SPP. (CHAINS)	.22	.41	2.41		105.00		2.76	7.31
CHAETOCEROS SPORES		.28			2.35	.43	.30	1.54
COSCINODISCUS SPP.		.07				.28	.10	.34
DACTYLIOSOLEN MEDITERRANEUS			.99					
EUCAMPIA ZODIACUS					2.26			
LEPTOCYLINDRUS DANICUS			1.42			.14		
RHIZOSOLENIA SPP.								.80
SCHRODERELLA DELICATULA							.34	.40
SKELETONEMA COSTATUM					21.20	3.41		11.40
STEPHANOPYXIS PALMERIANA							.05	
THALASSIOSIRA SPP.		.07	1.28		29.33	2.64	.49	3.08
TOTAL CENTRIC DIATOMS	.22	.83	38.75		169.96	27.66	4.19	25.48
PENNATE DIATOMS:								
ASTERIONELLA JAPONICA						.57		
CYLINDROTHECA CLOSTERIUM	.37	9.86					.15	.34
NITZSCHIA? LONGISSIMA	.07	.14	.85		1.51	.28	1.13	.60
NITZSCHIA? SPP.		.21	.99		26.42	3.27	2.32	8.25
THALASSIONEMA NITZSCHOIDES							.54	.34
UNID. PENNATES (5-20U)							.10	.07
UNID. PENNATES (21-40U)			.14			.43	.10	.20
UNID. PENNATES (41U-)	.15	1.58	.14			.71	.54	.87
TOTAL PENNATE DIATOMS	.59	11.79	2.13		27.93	5.26	4.88	10.67
DINOFLAGELLATES:								
PERIDINIUM		.14						
PLECTODINIUM		.41	.43		.75		.15	.13
UNID. DINOFLAGELLATES (5-15U)	2.71	8.15	1.33	124.00	61.90	12.70	3.10	9.74
UNID. DINOFLAGELLATES (16-50U)		1.17					.14	.74
FLAGELLATES AND OTHERS:								
DISTEPHANUS SPECULUM		.07				.14		.20
EUTREPTIELLA SPP.								.13
TOTAL FLAGELLATE CELLS	52.70	219.64	98.86	1883.00	768.58	97.84	118.59	90.76

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-04 VARIANTS LIST - STATIONS 2 TO 9 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	2	3	4	5	6	7	8	9
COCCOLITHOPHORIDS								.21
RHIZOSOLENIA SETIGERA			32.10		9.82	.14	.15	
UNIDENTIFIED FLAGELLATES (ALL)	49.99	209.70	95.10	1757.00	678.00	85.00	115.20	79.60
ZOOFLAGELLATES AND CILIATES	2.34	3.25	.28	12.30	1.51	.85	.34	5.30
VEXILLIFERA	.15	.21						

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 10 TO 18 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	10	11	12	13	14	15	17	18
CENTRIC DIATOMS:								
BACTERIASTRUM DELICATULA				.08				
BIDDULPHIA LONGICRURIS				.16				
CHAETOCEROS SPP. (SINGLE CELL)		.60		.16				
CHAETOCEROS SPP. (CHAINS)	.47	3.02	5.16	6.36	22.90			4.83
CHAETOCEROS SPORES	.25	.67	.54	.24	2.27			.13
COSCINODISCUS SPP.			.27					
DACTYLIOSOLENS MEDITERRANEUS				.56	.99			2.54
LEPTOCYLINDRUS DANICUS	.40			1.45	.14			2.92
RHIZOSOLENIA ALATA				.08				
RHIZOSOLENIA DELICATULA					.57			
RHIZOSOLENIA SPP.				.16				
SCHRODERELLA DELICATULA				.48	1.42			2.54
SKELETONEMA COSTATUM	1.30	11.40	23.20		8.10			3.44
THALASSIOSIRA SPP.	1.23	1.95	8.72	.24	3.13			2.03
UNID. CENTRICS		.87			.14			
TOTAL CENTRIC DIATOMS	3.75	19.12	37.96	41.99	40.23			61.73
PENNATE DIATOMS:								
ASTERIONELLA JAPONICA								.25
CYLINDROTHECA CLOSTERIUM	.79	.47	.40	.08	.43	6.85	7.60	
NITZSCHIA? LONGISSIMA	.97	.47	1.34	.24	.85			1.10
NITZSCHIA? SPP.	2.85	2.35	6.04	.73	4.84	.40	.36	.64
THALASSIONEMA NITZSCHOIDES	.40	.87	1.34					
TROPIDONEIS SPP.				.08			.07	.25
UNID. PENNATES (5-200)	.04	.27	.13					
UNID. PENNATES (21-400)	.32	.34	.27	.08	.99		.21	.13
UNID. PENNATES (410-)	.83	.60	.80	.08	.18			.13
TOTAL PENNATE DIATOMS	6.20	5.37	10.33	1.21	7.40	7.25	8.24	2.50
DINOFLAGELLATES:								
CERATIUM					.14			
GONYAULAX				.24	.28	.07		
GYRODINIUM					.28			
PERIDINIUM			.27	.32	.14		.07	.13
PLECTODINIUM	.04				.71	.87	.43	
PROROCENTRUM				.16				
UNID. DINOFLAGELLATES (5-150)	8.50		17.20	1.47	10.40	11.90	10.20	12.50
UNID. DINOFLAGELLATES (16-500)	.04	5.48	.54		1.85	1.47	.50	1.14
FLAGELLATES AND OTHERS:								
DISTEPHANUS SPECULUM	.14							
TOTAL FLAGELLATE CELLS	190.91	98.81	94.41	35.24	86.01	86.61	206.20	66.92
CILIATES						2.28	1.50	

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	10	11	12	13	14	15	17	18
COCCOLITHOPHORIDS								.25
RHIZOSOLENIA SETIGERA	.11	.34	.13	32.00	.43			43.30
STEPHANOPYXIS SPP.		.27			.14			
UNIDENTIFIED FLAGELLATES (ALL)	182.20	92.94	76.40	33.05	72.20	72.30	195.00	52.90
ZOOFLAGELLATES AND CILIATES	3.67	.60	1.68	.40	1.99	.13	.92	.76
VEXILLIFERA						.47	.14	.13

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-04 STANDARD LIST - STATIONS 19 TO 22 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	19	20	21	22
CENTRIC DIATOMS:				
BACTERIASTRUM DELICATULA	.73			
CHAETOCEROS SPP. (SINGLE CELL)	13.90	.13	.21	
CHAETOCEROS SPP. (CHAINS)	14.70	4.22	2.42	20.54
CHAETOCEROS SPORES	1.46	.54		.40
DACTYLIOSOLENS MEDITERRANEUS	7.32			.13
LEPTOCYLINDRUS DANICUS	2.20	.13		
RHIZOSOLENIA ALATA	1.46			
SCHRODERELLA DELICATULA				3.75
SKELETONEMA COSTATUM		18.10	7.80	18.10
THALASSIOSIRA SPP.	2.20	11.20	.45	7.12
TOTAL CENTRIC DIATOMS	316.97	34.46	11.23	62.65
PENNATE DIATOMS:				
ASTERIONELLA JAPONICA		.54		
CYLINDROTHECA CLOSTERIUM	.73		.55	
NITZSCHIA? LONGISSIMA	.73	1.01	2.00	2.55
NITZSCHIA? SPP.	3.66		4.00	10.33
THALASSIONEMA NITZSCHOIDES				.13
UNID. PENNATES (5-20U)		.07	.14	.27
UNID. PENNATES (21-40U)	.73	.27	.90	
UNID. PENNATES (41U-)	.73	1.54	1.38	.54
TOTAL PENNATE DIATOMS	6.59	3.42	8.97	13.82
DINOFLAGELLATES:				
CERATIUM	.73			
GONYAULAX			.21	.27
GYMNODINIUM		.07		
PERIDINIUM	3.66	.13	.21	
PLECTODINIUM		.54	.14	.13
PROROCENTRUM	1.46			.13
UNID. DINOFLAGELLATES (5-15U)	14.10	4.26	7.55	3.54
UNID. DINOFLAGELLATES (16-50U)	3.66	.74		
FLAGELLATES AND OTHERS:				
DISTEPHANUS SPECULUM		.20	.48	.54
EUTREPTIELLA SPP.		.74		.27
TOTAL FLAGELLATE CELLS	372.81	112.38	148.39	99.20
CILIATES			4.48	

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-04 VARIANTS LIST - STATIONS 19 TO 22 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	19	20	21	22
RHIZOSOLENIA SETIGERA	273.00		.34	12.80
STEPHANOPYXIS SPP.		.13		
UNIDENTIFIED FLAGELLATES (ALL)	349.20	105.70	139.60	94.32
ZOOFLAGELLATES AND CILIATES	9.51	5.71	.11	6.30
VEXILLIFERA			.07	

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 3 TO 15 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	3	6	7	8	11	12	13	15
CENTRIC DIATOMS:								
BIDDULPHIA AURITA						.14		
CHAETOCEROS SPP. (SINGLE CELL)	16.76	.24	4.83		10.30	8.66	8.16	.28
CHAETOCEROS SPP. (CHAINS)	9.28					2.41		1.04
CHAETOCEROS SPORES	2.32					.14		
COSCINODISCUS SPP.	.52		.54			.28		
CORETHRON HYSTRIX		.05				.28	.43	.57
DACTYLIOSOLENS MEDITERRANEUS	.26							59.10
LEPTOCYLINDRUS DANICUS	1.55		9.66					
RHIZOSOLENIA SPP.	.77							
SKELETONEMA COSTATUM	6.44			2.15				
STEPHANOPYXIS PALMERIANA	.77							
THALASSIOSIRA SPP.	14.14	.05	.67			.57		.28
TOTAL CENTRIC DIATOMS	52.75	.39	15.70	2.15	10.30	12.47	8.59	61.36
PENNATE DIATOMS:								
CYLINDROTHECA CLOSTERIUM		.19	.54			1.42	1.72	
NITZSCHIA? LONGISSIMA			.27					
NITZSCHIA? SPP.	12.10	5.21	14.20	1.29	2.15	.14	1.29	39.80
THALASSIONEMA NITZSCHOIDES	.77							
TROPIDONEIS SPP.	.26					.14		
UNID. PENNATES (5-20U)	1.80	.14	.27		.43	.43		.14
UNID. PENNATES (21-40U)	1.29	.05						
UNID. PENNATES (41U-)	.52	.14	.13			.57	.86	
TOTAL PENNATE DIATOMS	16.74	5.73	15.41	1.29	2.58	2.70	3.87	39.94
DINOFLAGELLATES:								
AMPHIDINIUM	.26					.85		.28
GONYAULAX							1.72	
GYMNODINIUM						.57		.14
GYRODINIUM				.43	.43		.86	
PERIDINIUM				2.58		.28		1.14
PLECTODINIUM	1.29	.43	.40					
PRONOCTILUCA	.52							
PROROCENTRUM		.66						
UNID. DINOFLAGELLATES (5-15U)	5.15	8.01	13.70	14.60	2.15	3.55	7.73	6.18
UNID. DINOFLAGELLATES (16-50U)		1.28						
FLAGELLATES AND OTHERS:								
DISTEPHANUS SPECULUM		.05	.13					.50
EUTREPTIELLA SPP.		.33						
TOTAL FLAGELLATE CELLS	34.54	91.48	125.73	91.52	57.94	79.07	118.08	151.36

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 3 TO 15 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	3	6	7	8	11	12	13	15
COCCOLITHOPHORIDS		12.30	11.10	6.01	2.58	1.42	6.87	4.72
RHIZOSOLENIA SETIGERA		.05						
UNIDENTIFIED FLAGELLATES (ALL)	27.32	68.42	100.40	67.90	52.78	72.40	100.90	138.40
ZOOFLAGELLATES AND CILIATES	1.80	3.41	4.85	8.59		2.41		2.64

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 17 TO 31 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	17	19	21	24	25	27	29	31
CENTRIC DIATOMS:								
BACTERIASTRUM DELICATULA				.14	.81			.81
CHAETOCEROS SPP. (SINGLE CELL)				26.90	5.85	6.10	9.38	
CHAETOCEROS SPP. (CHAINS)				2.84	10.19	11.07		.69
CHAETOCEROS SPORES				.29	.13			.04
COSCINODISCUS SPP.					.53	1.14	.28	.08
CORETHRON HYSTRIX	.46	.44		.28	.13	.57		
EUCAMPIA ZODIACUS					.13	1.14		
LEPTOCYLINDRUS DANICUS	66.20			1.71	2.01			.77
RHIZOSOLENIA SPP.				4.26	6.18	.99		
SKELETONEMA COSTATUM				4.26	1.21	.28		.56
THALASSIOSIRA SPP.	.81			3.83	4.82	2.27	4.26	.16
TOTAL CENTRIC DIATOMS	67.40	.44		44.50	32.25	25.57	15.20	7.98
PENNATE DIATOMS:								
CYLINDROTHECA CLOSTERIUM				.28			.28	
NITZSCHIA? SPP.	14.10	2.67	.43	52.10	101.00	160.00	173.00	1.49
THALASSIONEMA NITZSCHOIDES					.81	.28	.57	
TROPIDONEIS SPP.				.14		.57	.43	
UNID. PENNATES (5-20U)	.81				.54	.14	.28	
UNID. PENNATES (21-40U)				.14		.43	.17	
UNID. PENNATES (41U-)				.28	.40	1.42	1.17	.20
TOTAL PENNATE DIATOMS	14.91	2.67	.43	52.94	102.75	162.84	175.87	1.69
DINOFLAGELLATES:								
CERATIUM				.99	.66	.43	.17	1.41
DINOPHYSIS				.14				.04
GONYAULAX				.28	.27	1.14	1.28	.04
GYMNODINIUM	.40							
GYRODINIUM					.67	.99		.28
PERIDINIUM				.14	.27		.28	
PLECTODINIUM	1.21	.51		.57	.27	1.14	.57	
PROROCENTRUM		.13		.43	.81	.71	.17	
UNID. DINOFLAGELLATES (5-15U)	25.10	3.18	7.73	.27	7.31	11.70		2.92
UNID. DINOFLAGELLATES (16-50U)			.86					
FLAGELLATES AND OTHERS:								
DISTEPHANUS SPECULUM							.17	
TOTAL FLAGELLATE CELLS	158.67	36.43	108.68	55.86	73.27	88.01	52.91	37.36

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 17 TO 31 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	17	19	21	24	25	27	29	31
COCCOLITHOPHORIDS	4.66	.51	1.29	1.37				
RHIZOSOLENIA SETIGERA							1.28	4.87
STEPHANOPYXIS SPP.					.27			
UNIDENTIFIED FLAGELLATES (ALL)	127.10	32.10	96.80	51.66	63.00	71.90	50.27	32.35
ZOOFLAGELLATES AND CILIATES	4.46	.76	1.29	4.12	2.28	3.98	3.40	1.06

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 33 TO 45 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D. :	33	35	36	37	39	41	43	45
CENTRIC DIATOMS:								
COSCINODISCUS SPP.		.91						
THALASSIOSIRA SPP.		1.83	1.37	.46	.46	1.83		
TOTAL CENTRIC DIATOMS		2.74	1.37	.46	.46	1.83		
PENNATE DIATOMS:								
NITZSCHIA? SPP.	.47	1.37	.91		.91			1.33
UNID. PENNATES (5-200)					.91			
UNID. PENNATES (21-400)					.46			
TOTAL PENNATE DIATOMS	.47	1.37	.91		2.28			1.33
DINOFLAGELLATES:						.46		
GYMNODINIUM							.46	
PLECTODINIUM	2.13	7.31	6.85	1.83	9.13	14.60	9.59	33.50
UNID. DINOFLAGELLATES (5-150)					.91	.46		
UNID. DINOFLAGELLATES (16-500)								.44
FLAGELLATES AND OTHERS:								
DISTEPHANUS SPECULUM	39.00	102.69	72.70	77.18	57.93	122.46	66.20	160.53
TOTAL FLAGELLATE CELLS								

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 33 TO 45 PAGE 1

(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D. :	33	35	36	37	39	41	43	45
COCCOLITHOPHORIDS		2.28	.91	1.83		3.65	.91	.89
COCHLODINIUM							.46	
UNIDENTIFIED FLAGELLATES (ALL)	36.67	93.10	64.94	73.52	47.89	103.30	54.78	125.70
ZOOFLAGELLATES AND CILIATES	1.18	2.29	1.83		.91	1.83	1.83	2.65

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 47 TO 63 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D. :	47	49	51	53	57	59	61	63
CENTRIC DIATOMS:								
CHAETOCEROS SPP. (SINGLE CELL)					3.55	13.00		
CHAETOCEROS SPP. (CHAINS)	17.87				1.42			
COSCINODISCUS SPP.	.13					2.18		
CORETHRON HYSTRIX							.24	
EUCAMPIA SPP.					.28			
LEPTOCYLINDRUS DANICUS	1.27	.91						
RHIZOSOLENIA STOLTERFOTHII					2.13			
RHIZOSOLENIA SPP.					1.42			
SKELETONEMA COSTATUM	.51				1.14			
STEPHANOPYXIS PALMERIANA	.25							
THALASSIOSIRA SPP.	2.42				2.99	17.36	.97	3.26
TOTAL CENTRIC DIATOMS	24.49	.91			12.93	32.54	1.21	3.26
PENNATE DIATOMS:								
CYLINDROTHECA CLOSTERIUM					.14	10.90		
NITZSCHIA? LONGISSIMA					.28		.48	
NITZSCHIA? SPP.	3.44	1.37	.44		44.05		197.00	.54
THALASSIONEMA NITZSCHOIDES					.28			
TROPIDONEIS SPP.					.14			
UNID. PENNATES (5-20U)					.43			
UNID. PENNATES (21-40U)	.64				.28		.72	
UNID. PENNATES (41U-)	.25				1.28		.48	
TOTAL PENNATE DIATOMS	4.33	1.37	.44		46.89	10.90	198.69	.54
DINOFLAGELLATES:								
CERATIUM					.71			
DINOPHYSIS					.14			
GYRODINIUM						6.54	.24	1.64
PERIDINIUM	.13							
PLECTODINIUM	.38				.28	2.18		
PROROCENTRUM						10.90		
UNID. DINOFLAGELLATES (5-15U)	1.16	32.00	6.64	3.35	3.22	54.50	14.60	7.08
UNID. DINOFLAGELLATES (16-50U)	.25				.14		4.83	
FLAGELLATES AND OTHERS:								
DISTEPHANUS SPECULUM	.13	.46	.44					
EUTREPTIELLA SPP.						4.36		
TOTAL FLAGELLATE CELLS	15.52	230.11	113.34	52.02	29.64	376.98	121.57	82.25

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 VARIANTS LIST - STATIONS 47 TO 63 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D. :	47	49	51	53	57	59	61	63
COCCOLITHOPHORIDS		3.65	2.22	1.03	.14	72.00	13.30	2.73
COCHLODINIUM			.44					
RHIZOSOLENIA SETIGERA	2.04							
UNIDENTIFIED FLAGELLATES (ALL)	13.47	194.00	103.60	47.60	25.01	226.50	88.60	70.80
ZOOFLAGELLATES AND CILIATES	.10	4.11		1.03	2.70	41.38	3.62	.55

PHYTOPLANKTON HAUL RESULTS - CRUISE 79-05 STANDARD LIST - STATIONS 65 TO 68 PAGE 1
(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	65	67	68
CENTRIC DIATOMS:			
THALASSIOSIRA SPP.	1.29	1.11	1.29
TOTAL CENTRIC DIATOMS	1.29	1.11	1.29
PENNATE DIATOMS:			
CYLINDROTHECA CLOSTERIUM			1.72
NITZSCHIA? SPP.	1.29	.66	
UNID. PENNATES (41U-)	.43	.22	
TOTAL PENNATE DIATOMS	1.72	.89	1.72
DINOFLAGELLATES:			
GONYAULAX		.44	
GYRODINIUM	1.29	.44	
PRONOCTILUCA			.86
UNID. DINOFLAGELLATES (5-15U)	14.60	6.64	4.72
FLAGELLATES AND OTHERS:			
TOTAL FLAGELLATE CELLS	69.52	47.44	63.15

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(VALUES ARE NUMBER OF ORGANISMS/LITER - DIVIDED BY 10**4)

STATION I.D.	65	67	68
COCCOLITHOPHORIDS	.86	2.10	2.15
COCHLODINIUM			.43
OXYRRHIS		.44	
UNIDENTIFIED FLAGELLATES (ALL)	52.77	37.37	54.99
ZOOFLAGELLATES AND CILIATES	1.29	2.21	.43